

# Sustainably Grown Pesticide Policy

---

## 2024 Policy Revisions – Summary of Changes

---

This Policy was updated in partnership with the Integrated Pest Management (IPM) Institute of North America. The previous policy included a list of prohibited pesticides that could not be used under Sustainably Grown certification unless a temporary exemption was requested and approved. This revised policy establishes three categories into which active ingredients are classified:

- 1) Prohibited (without exemption),
- 2) Restricted (use requires an approved temporary exemption request), and
- 3) Mitigated use (with use justification).

This allows for different levels of permitted usage within Sustainably Grown that reflects different levels of hazard and usage among pesticide active ingredients.

Additional changes include the addition of a new reference list, the University of California Integrated Pest Management (UC IPM) Bee Precaution Ratings Level I active ingredients, and revisions based on updates to the Pesticide Action Network (PAN) International List of Highly Hazardous Pesticides (HHPs), last revised in March 2021. The previous version of this policy referenced the PAN International Highly Hazardous Pesticides list published in 2015 (the most recent available at the time). The addition of UC IPM Bee Precaution Ratings Level I added (among other chemicals) nitroguanidine neonicotinoids, which are placed in Category 2, Restricted (prohibited unless an exemption is granted).

## Pesticide Policy

---

Growers certified under the Sustainably Grown Standard are expected to correctly identify the key pests impacting the farming operation and prioritize the use of low risk solutions in dealing with insect, weed, and disease pressure to crops.

The Sustainably Grown Standard prohibits and restricts the use of certain pesticides on certified Agricultural Production Operations as determined by legal requirements, regulations, and international lists of references that were selected by SCS Standards (SCS). The reference lists were selected based on risks to human, environmental, and pollinator health. The 2021 Pesticide Action Network (PAN) International list of Highly Hazardous Pesticides was used as the source list for all of this Policy's reference lists with the exception of the UC IPM Bee Precaution Ratings.

- **WHO Ia:** World Health Organization (WHO) Extremely Hazardous (Class Ia)
- **WHO Ib:** World Health Organization (WHO) Highly Hazardous (Class Ib)

- **GHS:** Globally Harmonized System (GHS) Fatal if Inhaled (H330); Known or presumed human carcinogens (Carc. 1A, 1B); Known to induce or regarded as if they induce heritable mutations (Mutua. 1A, 1B); Known or presumed human reproductive toxicant (Repro. 1A, 1B)
- **EPA:** Environmental Protection Agency (EPA) active ingredients deemed carcinogenic, probably/likely carcinogenic to humans, or highly toxic to bees
- **IARC:** International Agency for Research on Cancer (IARC) active ingredients deemed carcinogenic or probably carcinogenic to humans
- **EU EDC:** EU Categorization of Endocrine Disruptors (Regulation 2018/605)
- **PIC:** United Nations Environment Programme and the FAO: Prior Informed Consent (PIC), Rotterdam Convention, Annex III
- **POP:** United Nations Environment Programme: Persistent Organic Pollutants (POP), Stockholm Convention, Annexes A, B, and C
- **Stockholm Convention:** Active ingredients deemed very bioaccumulative and very persistent in water, soil or sediment
- **University of California Integrated Pest Management Bee Precaution Ratings:** Pesticide ratings based on harm to bees; Level I

Use of the Pesticide Risk Tool ([pesticiderisk.org](http://pesticiderisk.org)) is recommended to assess environmental and human health risks associated with pesticide use, and to enable selection of lower risk alternatives and develop mitigation strategies for identified risks.

The prohibited pesticide reference list will be updated periodically based on the revision of reference lists by the publishing entity, or on decisions made by SCS. SCS will notify certification bodies of any updates and any corresponding phase-out requirements, who are required to inform their clients.

## Scope of Pesticide Policy

---

These prohibitions and restrictions apply to the crop(s) in scope of certification, and related activities under the Producer's management, including soil preparation, seed treatment, production, post-harvest treatment, and storage. If the certified crop is labeled with a certification claim at the point of sale, or is used as an ingredient in a finished product (with either an on-product or ingredient certification claim), then pesticide prohibitions extend to activities that take place at handling facility(ies), until the point where the product is in its final state (e.g. final consumer packaging).

## Prohibited and Restricted Pesticides

---

Active ingredients in Table 1. are prohibited or restricted for use in the Sustainably Grown program. Information about the active ingredient(s) contained in a pesticide product can be found on the pesticide product label and Safety Data Sheets.

### Category 1: Prohibited

**Active ingredients in this category are prohibited without exception.** Exemption requests are not permitted. These active ingredients are highly hazardous as identified by global conventions and authorities. Some are considered obsolete and no longer used in agriculture, and many have been phased out by many countries.

### Category 2: Restricted.

**Active ingredients in this category are prohibited unless an exemption is requested and granted.** Upon review, exemptions may be granted for specific use cases and with specific risk mitigation requirements. These active ingredients are highly hazardous but have known agricultural uses.

SCS acknowledges that pest pressure can be severe and/or unexpected, with limited management options, and provides for temporary exemptions for pesticides containing the active ingredients in Category 2.

### Category 3: Mitigated use with approval

**Active ingredients in this category may be used within a documented Integrated Pest Management program that includes use justification and mitigation measures to mitigate known risks.** Use justification includes evidence of need for the pesticide based on scouting/monitoring and economic thresholds, integration of non-chemical strategies that prevent or reduce prevalence of the target pest, and consideration of alternative chemical controls. Active ingredients in this category have known hazards to either environmental, human and/ pollinator health which place them on one or more of the source lists for this Policy, though have known, common agricultural uses.

## Sustainably Grown Prohibited and Restricted Pesticides

| Category 1  |                                | Human Health   |        |          |          |           |                    |                    |                     | Environmental Health |                                          | Pollinator Health                                       |                          | Int'l Conventions     |                 |                   |                 |
|-------------|--------------------------------|----------------|--------|----------|----------|-----------|--------------------|--------------------|---------------------|----------------------|------------------------------------------|---------------------------------------------------------|--------------------------|-----------------------|-----------------|-------------------|-----------------|
|             |                                | Acute Toxicity |        | Chronic  |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| CAS #       | Pesticide                      | WHO 1a         | WHO 1b | GHS H330 | EPA carc | IARC carc | GHS+ carc (1A, 1B) | GHS+ muta (1A, 1B) | GHS+ repro (1A, 1B) | EU EDC               | very bio accumulative (POP criteria "B") | very pers in water, soil or sediment (POP criteria "P") | US EPA highly toxic bees | UC IPM Bee Precaution | Rotterdam (PIC) | Montreal Protocol | Stockholm (POP) |
| 93-76-5     | 2,4,5-T                        |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       | x               |                   |                 |
| 101007-06-1 | ACRINATHRIN                    |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |
| 77536-66-4  | ACTINOLITE ASBESTOS            |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       | x               |                   |                 |
| 15972-60-8  | ALACHLOR                       |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       | x               |                   |                 |
| 83130-01-2  | ALANYCARB                      |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |
| 116-06-3    | ALDICARB                       |                | x      |          |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |
| 309-00-2    | ALDRIN                         |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       | x               |                   | x               |
| 584-79-2    | ALLETHRIN                      |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          | x                     |                 |                   |                 |
| 107-18-6    | ALLYL ALCOHOL                  |                | x      |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| 319-84-6    | ALPHA<br>HEXACHLOROCYCLOHEXANE |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       |                 |                   | x               |
| 12172-73-5  | AMOSITE ASBESTOS               |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       | x               |                   |                 |
| 77536-67-5  | ANTHOPHYLLITE                  |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       | x               |                   |                 |
| 90640-80-5  | ANTHRACENE OIL                 |                |        |          |          |           | x                  |                    |                     |                      |                                          |                                                         |                          |                       |                 |                   |                 |

|            |                                                                                                                                                  |   |   |   |   |   |   |  |   |   |   |  |   |  |  |   |  |   |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|--|---|---|---|--|---|--|--|---|--|---|
| 7778-39-4  | ARSENIC AND ITS COMPOUNDS                                                                                                                        |   |   |   | x | x | x |  |   |   |   |  |   |  |  |   |  |   |
| 68049-83-2 | AZAFENIDIN                                                                                                                                       |   |   |   |   |   |   |  | x |   |   |  |   |  |  |   |  |   |
| 35575-96-3 | AZAMETHIPHOS                                                                                                                                     |   |   |   |   |   |   |  |   |   |   |  | x |  |  |   |  |   |
| 2642-71-9  | AZINPHOS-ETHYL                                                                                                                                   |   | x |   |   |   |   |  |   |   |   |  | x |  |  |   |  |   |
| 86-50-0    | AZINPHOS-METHYL                                                                                                                                  |   | x | x |   |   |   |  |   |   |   |  | x |  |  | x |  |   |
| 41083-11-8 | AZOCYCLOTIN                                                                                                                                      |   |   | x |   |   |   |  |   |   | x |  |   |  |  |   |  |   |
| 22781-23-3 | BENDIOCARB                                                                                                                                       |   |   |   |   |   |   |  |   |   |   |  | x |  |  |   |  |   |
| 82560-54-1 | BENFURACARB                                                                                                                                      |   |   |   |   |   |   |  |   |   |   |  | x |  |  |   |  |   |
| 17804-35-2 | BENOMYL (DUSTABLE POWDER FORMULATIONS CONTAINING A COMBINATION OF BENOMYL AT OR ABOVE 7%, CARBOFURAN AT OR ABOVE 10% AND THIRAM AT OR ABOVE 15%) |   |   |   |   |   |   |  | x | x |   |  |   |  |  | x |  |   |
| 319-85-7   | BETA HEXACHLOROCYCLOHEXANE                                                                                                                       |   |   |   |   |   |   |  |   |   |   |  |   |  |  |   |  | x |
| 485-31-4   | BINAPACRYL                                                                                                                                       |   |   |   |   |   |   |  |   |   |   |  |   |  |  | x |  |   |
| 28434-01-7 | BIORESMETHRIN                                                                                                                                    |   |   |   |   |   |   |  | x |   |   |  | x |  |  |   |  |   |
| 92-52-4    | BIPHENYL, DIPHENYL                                                                                                                               |   |   |   |   |   | x |  |   |   |   |  |   |  |  |   |  |   |
| 2079-00-7  | BLASTICIDIN-S                                                                                                                                    |   | x |   |   |   |   |  |   |   |   |  |   |  |  |   |  |   |
| 4824-78-6  | BROMOPHOS-ETHYL                                                                                                                                  |   | x |   |   |   |   |  |   |   |   |  |   |  |  |   |  |   |
| 34681-10-2 | BUTOCARBOXIM                                                                                                                                     |   |   |   |   |   |   |  |   |   |   |  | x |  |  |   |  |   |
| 34681-23-7 | BUTOXYCARBOXIM                                                                                                                                   |   | x |   |   |   |   |  |   |   |   |  |   |  |  |   |  |   |
| 7778-44-1  | CALCIUM ARSENATE                                                                                                                                 |   | x |   |   |   |   |  |   |   |   |  |   |  |  |   |  |   |
| 592-01-8   | CALCIUM CYANIDE                                                                                                                                  | x |   |   |   |   |   |  |   |   |   |  |   |  |  | x |  |   |
| 2425-06-1  | CAPTAFOL                                                                                                                                         | x |   |   |   |   | x |  |   |   |   |  |   |  |  | x |  |   |

|            |                                                                                                                         |   |   |   |  |  |   |  |   |  |   |  |   |  |  |   |   |
|------------|-------------------------------------------------------------------------------------------------------------------------|---|---|---|--|--|---|--|---|--|---|--|---|--|--|---|---|
| 16118-49-3 | CARBETAMIDE                                                                                                             |   |   |   |  |  |   |  | x |  |   |  |   |  |  |   |   |
| 1563-66-2  | CARBOFURAN                                                                                                              |   | x | x |  |  |   |  |   |  |   |  | x |  |  | x |   |
| 55285-14-8 | CARBOSULFAN                                                                                                             |   |   | x |  |  |   |  |   |  |   |  | x |  |  | x |   |
| 57-74-9    | CHLORDANE                                                                                                               |   |   |   |  |  |   |  |   |  | x |  |   |  |  | x | x |
| 143-50-0   | CHLORDECONE                                                                                                             |   |   |   |  |  |   |  |   |  |   |  |   |  |  |   | x |
| 6164-98-3  | CHLORDIMEFORM                                                                                                           |   |   |   |  |  |   |  |   |  |   |  |   |  |  | x |   |
| 470-90-6   | CHLORFENVINPHOS                                                                                                         |   | x |   |  |  |   |  |   |  |   |  | x |  |  |   |   |
| 71422-67-8 | CHLORFLUAZURON                                                                                                          |   |   |   |  |  |   |  |   |  | x |  |   |  |  |   |   |
| 24934-91-6 | CHLORMEPHOS                                                                                                             | x |   |   |  |  |   |  |   |  |   |  |   |  |  |   |   |
| 510-15-6   | CHLOROBENZILATE                                                                                                         |   |   |   |  |  |   |  |   |  |   |  |   |  |  | x |   |
| 5598-13-0  | CHLORPYRIFOS-METHYL                                                                                                     |   |   |   |  |  |   |  | x |  |   |  | x |  |  |   |   |
| 38083-17-9 | CLIMBAZOLE                                                                                                              |   |   |   |  |  |   |  |   |  |   |  | x |  |  |   |   |
| 32536-52-0 | COMMERCIAL<br>OCTABROMODIPHENYL<br>ETHER (INCLUDING<br>HEXABROMODIPHENYL<br>ETHER AND<br>HEPTABROMODIPHENYL<br>ETHER)   |   |   |   |  |  |   |  |   |  |   |  |   |  |  | x | x |
| 32534-81-9 | COMMERCIAL<br>PENTABROMODIPHENYL<br>ETHER (INCLUDING<br>TETRABROMODIPHENYL<br>ETHER AND<br>PENTABROMODIPHENYL<br>ETHER) |   |   |   |  |  |   |  |   |  |   |  |   |  |  | x | x |
| 56-72-4    | COUMAPHOS                                                                                                               |   | x | x |  |  |   |  | x |  |   |  |   |  |  |   |   |
| 5836-29-3  | COUMATETRALYL                                                                                                           |   | x |   |  |  |   |  |   |  |   |  |   |  |  |   |   |
| 8001-58-9  | CREOSOTE                                                                                                                |   |   |   |  |  | x |  |   |  |   |  |   |  |  |   |   |
| 12001-28-4 | CROCIDOLITE                                                                                                             |   |   |   |  |  |   |  |   |  |   |  |   |  |  | x |   |

|             |                                                                                                   |   |   |   |  |  |   |  |   |  |   |  |   |  |   |  |   |
|-------------|---------------------------------------------------------------------------------------------------|---|---|---|--|--|---|--|---|--|---|--|---|--|---|--|---|
| 13121-70-5  | CYHEXATIN                                                                                         |   |   |   |  |  |   |  |   |  | x |  |   |  |   |  |   |
| 65731-84-2  | CYPERMETHRIN, BETA                                                                                |   |   |   |  |  |   |  |   |  |   |  | x |  |   |  |   |
| 52918-63-5  | DELTAMETHRIN                                                                                      |   |   |   |  |  |   |  |   |  |   |  | x |  |   |  |   |
| 919-86-8    | DEMETON-S-METHYL                                                                                  |   | x |   |  |  |   |  |   |  |   |  | x |  |   |  |   |
| 80060-09-9  | DIAFENTHIURON                                                                                     |   |   |   |  |  |   |  |   |  |   |  | x |  |   |  |   |
| 120-36-5    | DICHLORPROP                                                                                       |   |   |   |  |  |   |  | x |  |   |  |   |  |   |  |   |
| 62-73-7     | DICHLORVOS                                                                                        |   | x | x |  |  |   |  |   |  |   |  | x |  |   |  |   |
| 115-32-2    | DICOFOL                                                                                           |   |   |   |  |  |   |  |   |  |   |  |   |  |   |  | x |
| 60-57-1     | DIELDRIN                                                                                          |   |   |   |  |  |   |  |   |  |   |  |   |  | x |  | x |
| 104653-34-1 | DIFETHIALONE                                                                                      | x |   | x |  |  |   |  | x |  |   |  |   |  |   |  |   |
| 497-56-3    | DINITRO-ORTHO-CRESOL (DNOC) AND ITS SALTS (SUCH AS AMMONIUM SALT, POTASSIUM SALT AND SODIUM SALT) |   |   |   |  |  |   |  |   |  |   |  |   |  | x |  |   |
| 39300-45-3  | DINOCAP                                                                                           |   |   |   |  |  |   |  | x |  |   |  |   |  |   |  |   |
| 88-85-7     | DINOSEB AND ITS SALTS AND ESTERS                                                                  |   |   |   |  |  |   |  |   |  |   |  |   |  | x |  |   |
| 1420-07-1   | DINOTERB                                                                                          |   | x |   |  |  |   |  | x |  |   |  |   |  |   |  |   |
| 4032-26-2   | DIQUAT (DICHLORIDE)                                                                               |   |   | x |  |  |   |  |   |  |   |  |   |  |   |  |   |
| 298-04-4    | DISULFOTON                                                                                        | x |   |   |  |  |   |  |   |  |   |  |   |  |   |  |   |
| 534-52-1    | DNOC                                                                                              |   | x | x |  |  |   |  |   |  |   |  |   |  | x |  |   |
| 106-93-4    | EDB (1,2-DIBROMOETHANE)                                                                           |   |   |   |  |  | x |  |   |  |   |  |   |  | x |  |   |
| 17109-49-8  | EDIFENPHOS                                                                                        |   | x |   |  |  |   |  |   |  |   |  |   |  |   |  |   |
| 115-29-7    | ENDOSULFAN                                                                                        |   |   | x |  |  |   |  |   |  |   |  |   |  | x |  | x |
| 72-20-8     | ENDRIN                                                                                            |   |   |   |  |  |   |  |   |  |   |  |   |  |   |  | x |
| 297-99-4    | E-PHOSPHAMIDON                                                                                    | x |   |   |  |  |   |  |   |  |   |  |   |  |   |  |   |
| 106-89-8    | EPICHLOROHYDRIN                                                                                   |   |   |   |  |  | x |  |   |  |   |  |   |  |   |  |   |
| 2104-64-5   | EPN                                                                                               | x |   |   |  |  |   |  |   |  |   |  | x |  |   |  |   |

|             |                                 |  |   |   |  |   |   |  |   |  |   |  |   |  |  |   |  |   |
|-------------|---------------------------------|--|---|---|--|---|---|--|---|--|---|--|---|--|--|---|--|---|
| 29973-13-5  | ETHIOFENCARB                    |  | x |   |  |   |   |  |   |  |   |  |   |  |  |   |  |   |
| 563-12-2    | ETHION                          |  |   | x |  |   |   |  |   |  |   |  |   |  |  |   |  |   |
| 23947-60-6  | ETHIRIMOL                       |  |   |   |  |   |   |  |   |  |   |  | x |  |  |   |  |   |
| 107-06-2    | ETHYLENE DICHLORIDE             |  |   |   |  |   | x |  |   |  |   |  |   |  |  | x |  |   |
| 96-45-7     | ETHYLENE THIOUREA               |  |   |   |  |   |   |  | x |  |   |  |   |  |  |   |  |   |
| 52-85-7     | FAMPHUR                         |  | x |   |  |   |   |  |   |  |   |  |   |  |  |   |  |   |
| 103112-35-2 | FENCHLORAZOLE-ETHYL             |  |   |   |  |   | x |  |   |  |   |  |   |  |  |   |  |   |
| 122-14-5    | FENITROTHION                    |  |   |   |  |   |   |  |   |  |   |  | x |  |  |   |  |   |
| 72490-01-8  | FENOXYCARB                      |  |   |   |  |   |   |  |   |  |   |  | x |  |  |   |  |   |
| 55-38-9     | FENTHION / FENTHION ><br>640G/L |  |   |   |  |   |   |  |   |  |   |  | x |  |  | x |  |   |
| 900-95-8    | FENTIN ACETATE                  |  |   | x |  |   |   |  |   |  |   |  |   |  |  |   |  |   |
| 51630-58-1  | FENVALERATE                     |  |   |   |  |   |   |  |   |  |   |  | x |  |  |   |  |   |
| 69806-50-4  | FLUAZIFOP-BUTYL                 |  |   |   |  |   |   |  | x |  |   |  |   |  |  |   |  |   |
| 174514-07-9 | FLUAZOLATE                      |  |   |   |  |   |   |  |   |  | x |  |   |  |  |   |  |   |
| 70124-77-5  | FLUCYTHRINATE                   |  | x |   |  |   |   |  |   |  |   |  | x |  |  |   |  |   |
| 101463-69-8 | FLUFENOXURON                    |  |   |   |  |   |   |  |   |  | x |  |   |  |  |   |  |   |
| 640-19-7    | FLUOROACETAMIDE                 |  | x |   |  |   |   |  |   |  |   |  |   |  |  | x |  |   |
| 85509-19-9  | FLUSILAZOLE                     |  |   |   |  |   |   |  | x |  |   |  |   |  |  |   |  |   |
| 106917-52-6 | FLUSULFAMIDE                    |  |   | x |  |   |   |  |   |  |   |  |   |  |  |   |  |   |
| 22259-30-9  | FORMETANATE                     |  | x | x |  |   |   |  |   |  |   |  | x |  |  |   |  |   |
| 65907-30-4  | FURATHIOCARB                    |  | x | x |  |   |   |  |   |  |   |  |   |  |  |   |  |   |
| 111872-58-3 | HALFENPROX                      |  |   |   |  |   |   |  |   |  | x |  |   |  |  |   |  |   |
| 58-89-9     | HCH (LINDANE)                   |  |   |   |  | x |   |  |   |  |   |  | x |  |  | x |  | x |
| 76-44-8     | HEPTACHLOR                      |  |   |   |  |   |   |  |   |  |   |  |   |  |  | x |  | x |
| 23560-59-0  | HEPTENOPHOS                     |  | x |   |  |   |   |  |   |  |   |  | x |  |  |   |  |   |
| 59080-40-9  | HEXABROMOBIPHENYL               |  |   |   |  |   |   |  |   |  |   |  |   |  |  |   |  | x |
| 3194-55-6   | HEXABROMOCYCLODODE<br>CANE      |  |   |   |  |   |   |  |   |  |   |  |   |  |  |   |  | x |

|             |                                                                                                                                                  |   |   |   |  |  |   |  |  |  |   |   |   |  |   |   |   |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|--|--|---|--|--|--|---|---|---|--|---|---|---|
| 118-74-1    | HEXACHLOROBENZENE<br>(PERCHLOROBENZENE)                                                                                                          | x |   |   |  |  | x |  |  |  | x |   |   |  | x |   | x |
| 608-73-1    | HEXCHLOROCYCLOHEXAN<br>E; MIX OF ISOMERS (BETA-<br>HCH & ALPHA-HCH)                                                                              |   |   |   |  |  |   |  |  |  |   |   |   |  | x |   |   |
| 74-90-8     | HYDROGEN CYANIDE                                                                                                                                 | x |   | x |  |  |   |  |  |  |   |   |   |  |   |   |   |
| 881685-58-1 | ISOPYRAZAM                                                                                                                                       |   |   |   |  |  |   |  |  |  |   | x |   |  |   |   |   |
| 18854-01-8  | ISOXATHION                                                                                                                                       |   | x |   |  |  |   |  |  |  |   |   | x |  |   |   |   |
| 7784-40-9   | LEAD ARSENATE                                                                                                                                    |   | x |   |  |  |   |  |  |  |   |   |   |  |   |   |   |
| 2595-54-2   | MECARBAM                                                                                                                                         |   | x |   |  |  |   |  |  |  |   |   |   |  |   |   |   |
| 7487-94-7   | MERCURIC CHLORIDE                                                                                                                                | x |   |   |  |  |   |  |  |  |   |   |   |  |   |   |   |
| 21908-53-2  | MERCURIC OXIDE                                                                                                                                   | x |   |   |  |  |   |  |  |  |   |   |   |  |   |   |   |
| 7439-97-6   | MERCURY COMPOUNDS,<br>INCLUDING INORGANIC<br>MERCURY COMPOUNDS,<br>ALKYL MERCURY<br>COMPOUNDS AND<br>ALKYLOXYALKYL AND ARYL<br>MERCURY COMPOUNDS |   |   | x |  |  |   |  |  |  |   |   |   |  | x |   |   |
| 18691-97-9  | METHABENZTHIAZURON                                                                                                                               |   |   |   |  |  |   |  |  |  |   |   | x |  |   |   |   |
| 10265-92-6  | METHAMIDOPHOS                                                                                                                                    |   | x | x |  |  |   |  |  |  |   |   | x |  | x |   |   |
| 950-37-8    | METHIDATHION                                                                                                                                     |   | x |   |  |  |   |  |  |  |   |   | x |  |   |   |   |
| 2032-65-7   | METHIOCARB                                                                                                                                       |   | x |   |  |  |   |  |  |  |   |   | x |  |   |   |   |
| 72-43-5     | METHOXYCHLOR                                                                                                                                     |   |   |   |  |  |   |  |  |  |   |   |   |  |   |   | x |
| 74-83-9     | METHYL BROMIDE                                                                                                                                   |   |   |   |  |  |   |  |  |  |   |   |   |  |   | x |   |
| 7786-34-7   | MEVINPHOS                                                                                                                                        | x |   |   |  |  |   |  |  |  |   |   | x |  |   |   |   |
| 2385-85-5   | MIREX                                                                                                                                            |   |   |   |  |  |   |  |  |  |   |   |   |  |   |   | x |
| 6923-22-4   | MONOCROTOPHOS                                                                                                                                    |   | x | x |  |  |   |  |  |  |   |   | x |  | x |   |   |
| 54-11-5     | NICOTINE                                                                                                                                         |   | x |   |  |  |   |  |  |  |   |   |   |  |   |   |   |
| 150824-47-8 | NITENPYRAM                                                                                                                                       |   |   |   |  |  |   |  |  |  |   |   | x |  |   |   |   |

|             |                                             |   |   |   |  |  |  |  |  |   |  |  |  |   |   |  |   |   |
|-------------|---------------------------------------------|---|---|---|--|--|--|--|--|---|--|--|--|---|---|--|---|---|
| 98-95-3     | NITROBENZENE                                |   |   |   |  |  |  |  |  | x |  |  |  |   |   |  |   |   |
| 1113-02-6   | OMETHOATE                                   |   | x |   |  |  |  |  |  |   |  |  |  | x |   |  |   |   |
| 301-12-2    | OXYDEMOTON-METHYL                           |   | x |   |  |  |  |  |  |   |  |  |  | x |   |  |   |   |
| 56-38-2     | PARATHION                                   | x |   |   |  |  |  |  |  |   |  |  |  | x |   |  | x |   |
| 298-00-0    | PARATHION METHYL                            | x |   | x |  |  |  |  |  |   |  |  |  |   | x |  | x |   |
| 12002-03-8  | PARIS GREEN (COPPER ACETOARSENITE)          |   | x |   |  |  |  |  |  |   |  |  |  |   |   |  |   |   |
| 608-93-5    | PENTACHLOROBENZENE                          |   |   |   |  |  |  |  |  |   |  |  |  |   |   |  |   | x |
| 82-68-8     | PENTACHLORONITROBENZENE (QUINTOZENE)        |   |   |   |  |  |  |  |  |   |  |  |  |   | x |  |   |   |
| 87-86-5     | PENTACHLOROPHENOL                           |   | x | x |  |  |  |  |  |   |  |  |  |   |   |  | x |   |
| 1763-23-1   | PERFLUOROOCTANE SULFONIC ACID               |   |   |   |  |  |  |  |  |   |  |  |  |   |   |  | x | x |
| 2597-03-7   | PHENTHOATE                                  |   |   |   |  |  |  |  |  |   |  |  |  | x |   |  |   |   |
| 62-38-4     | PHENYLMERCURY ACETATE                       | x |   |   |  |  |  |  |  |   |  |  |  |   |   |  |   |   |
| 298-02-2    | PHORATE                                     | x |   |   |  |  |  |  |  |   |  |  |  | x |   |  |   |   |
| 13171-21-6  | PHOSPHAMIDON                                | x |   |   |  |  |  |  |  |   |  |  |  | x |   |  | x |   |
| 29232-93-7  | PIRIMIPHOS-METHYL                           |   |   |   |  |  |  |  |  |   |  |  |  | x |   |  |   |   |
| 59536-65-1  | POLYBROMINATED BIPHENYLS (PBBS)             |   |   |   |  |  |  |  |  |   |  |  |  |   |   |  | x |   |
| 1336-36-3   | POLYCHLORINATED BIPHENYLS (PCBS)            |   |   |   |  |  |  |  |  |   |  |  |  |   |   |  | x | x |
| 51207-31-9  | POLYCHLORINATED DIBENZOFURANS (FURANS)      |   |   |   |  |  |  |  |  |   |  |  |  |   |   |  |   | x |
| 136677-09-3 | POLYCHLORINATED DIBENZO-P-DIOXINS (DIOXINS) |   |   |   |  |  |  |  |  |   |  |  |  |   |   |  |   | x |



|                   |                                         |   |   |  |  |  |  |  |   |   |  |  |  |   |  |   |  |  |
|-------------------|-----------------------------------------|---|---|--|--|--|--|--|---|---|--|--|--|---|--|---|--|--|
| No CAS<br>(group) | TRIBUTYL TIN<br>COMPOUNDS               |   |   |  |  |  |  |  |   |   |  |  |  |   |  | x |  |  |
| 52-68-6           | TRICHLORFON                             |   |   |  |  |  |  |  |   |   |  |  |  | x |  | x |  |  |
| 81412-43-3        | TRIDEMORPH                              |   |   |  |  |  |  |  | x |   |  |  |  |   |  |   |  |  |
| 126-72-7          | TRIS(2,3<br>DIBROMOPROPYL)<br>PHOSPHATE |   |   |  |  |  |  |  |   |   |  |  |  |   |  | x |  |  |
| 37248-47-8        | VALIDAMYCIN                             |   |   |  |  |  |  |  |   |   |  |  |  | x |  |   |  |  |
| 2275-23-2         | VAMIDOTHION                             |   | x |  |  |  |  |  |   |   |  |  |  | x |  |   |  |  |
| 50471-44-8        | VINCLOZOLIN                             |   |   |  |  |  |  |  |   | x |  |  |  |   |  |   |  |  |
| 2655-14-3         | XMC                                     |   |   |  |  |  |  |  |   |   |  |  |  | x |  |   |  |  |
| 23783-98-4        | Z-PHOSPHAMIDON                          | x |   |  |  |  |  |  |   |   |  |  |  |   |  |   |  |  |

| Category 2   |                          | Human Health   |        |          |          |           |                    |                    |                     | Environmental Health |                                          | Pollinator Health                                       |                          | Int'l Conventions     |                 |                   |                 |
|--------------|--------------------------|----------------|--------|----------|----------|-----------|--------------------|--------------------|---------------------|----------------------|------------------------------------------|---------------------------------------------------------|--------------------------|-----------------------|-----------------|-------------------|-----------------|
|              |                          | Acute Toxicity |        |          | Chronic  |           |                    |                    |                     |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| CAS #        | Pesticide                | WHO 1a         | WHO 1b | GHS H330 | EPA carc | IARC carc | GHS+ carc (1A, 1B) | GHS+ muta (1A, 1B) | GHS+ repro (1A, 1B) | EU EDC               | very bio accumulative (POP criteria "B") | very pers in water, soil or sediment (POP criteria "P") | US EPA highly toxic bees | UC IPM Bee Precaution | Rotterdam (PIC) | Montreal Protocol | Stockholm (POP) |
| 96-24-2      | 3-CHLORO-1,2-PROPANEDIOL |                | x      |          |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| 71751-41-2   | ABAMECTIN                |                | x      | x        |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |
| 107-02-8     | ACROLEIN                 |                | x      | x        |          |           |                    |                    |                     |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| 20859-73-8   | ALUMINIUM PHOSPHIDE      |                |        | x        |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |
| 348635-87-0  | AMISULBROM               |                |        |          |          |           |                    |                    |                     |                      |                                          | x                                                       |                          |                       |                 |                   |                 |
| 84-65-1      | ANTHRAQUINONE            |                |        |          |          |           |                    |                    | x                   |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| 741-58-2     | BENSULIDE                |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |
| 1820573-27-0 | BETA-CYFLUTHRIN          |                | x      | x        |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |
| 82657-04-3   | BIFENTHRIN               |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |
| 1303-96-4    | BORAX; BORATE SALTS      |                |        |          |          |           |                    |                    | x                   |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| 10043-35-3   | BORIC ACID               |                |        |          |          |           |                    |                    | x                   |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| 56073-10-0   | BRODIFACOUM              | x              |        | x        |          |           |                    |                    | x                   |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| 28772-56-7   | BROMADIOLONE             | x              |        | x        |          |           |                    |                    | x                   |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| 63333-35-7   | BROMETHALIN              |                |        |          |          |           |                    |                    |                     |                      | x                                        |                                                         |                          |                       |                 |                   |                 |
| 1689-84-5    | BROMOXYNIL               |                |        | x        |          |           |                    |                    | x                   |                      |                                          |                                                         |                          |                       |                 |                   |                 |

|             |                                                              |   |   |   |  |  |  |   |   |  |   |   |   |   |   |  |   |
|-------------|--------------------------------------------------------------|---|---|---|--|--|--|---|---|--|---|---|---|---|---|--|---|
| 56634-95-8  | BROMOXYNIL<br>HEPTANOATE                                     |   |   |   |  |  |  |   | x |  | x |   |   |   |   |  |   |
| 1689-99-2   | BROMOXYNIL<br>OCTANOATE                                      |   |   |   |  |  |  |   | x |  | x |   |   |   |   |  |   |
| 95465-99-9  | CADUSAFOS                                                    |   | x |   |  |  |  |   |   |  |   | x | x |   |   |  |   |
| 63-25-2     | CARBARYL                                                     |   |   |   |  |  |  |   |   |  |   |   | x |   |   |  |   |
| 10605-21-7  | CARBENDAZIM                                                  |   |   |   |  |  |  | x | x |  |   |   |   |   |   |  |   |
| 54593-83-8  | CHLORETHOXYFOS                                               | x |   |   |  |  |  |   |   |  |   |   | x |   |   |  |   |
| 122453-73-0 | CHLORFENAPYR                                                 |   |   |   |  |  |  |   |   |  |   |   | x |   |   |  |   |
| 3691-35-8   | CHLOROPHACINONE                                              | x |   | x |  |  |  |   |   |  |   |   |   |   |   |  |   |
| 76-06-2     | CHLOROPICRIN                                                 |   |   | x |  |  |  |   |   |  |   |   |   |   |   |  |   |
| 1897-45-6   | CHLOROTHALONIL                                               |   |   | x |  |  |  |   |   |  |   |   |   |   |   |  |   |
| 2921-88-2   | CHLORPYRIFOS                                                 |   |   |   |  |  |  |   | x |  |   |   | x |   |   |  |   |
| 67-97-0     | CHOLECALCIFEROL                                              |   |   |   |  |  |  |   | x |  |   |   |   |   |   |  |   |
| 210880-92-5 | CLOTHIANIDIN                                                 |   |   |   |  |  |  |   |   |  |   |   | x |   |   |  |   |
| 736994-63-1 | CYANTRANILIPROLE                                             |   |   |   |  |  |  |   |   |  |   |   |   | x |   |  |   |
| 68359-37-5  | CYFLUTHRIN                                                   |   | x | x |  |  |  |   |   |  |   |   | x |   |   |  |   |
| 68085-85-8  | CYHALOTHRIN                                                  |   |   |   |  |  |  |   |   |  |   |   | x |   |   |  |   |
| 76703-62-3  | CYHALOTHRIN, GAMMA                                           |   |   |   |  |  |  |   |   |  |   |   | x | x |   |  |   |
| 52315-07-8  | CYPERMETHRIN                                                 |   |   |   |  |  |  |   |   |  |   |   | x |   |   |  |   |
| 67375-30-8  | CYPERMETHRIN, ALPHA                                          |   |   |   |  |  |  |   |   |  |   |   | x | x |   |  |   |
| 52315-07-8z | CYPERMETHRIN, ZETA                                           |   | x |   |  |  |  |   |   |  |   |   | x |   |   |  |   |
| 94361-06-5  | CYPROCONAZOLE                                                |   |   |   |  |  |  |   | x |  |   |   |   |   |   |  |   |
| 8022-00-2   | DEMETON-METHYL<br>(ISOMERE MIX OF O-<br>METHYL AND S-METHYL) |   |   | x |  |  |  |   |   |  |   |   |   |   |   |  |   |
| 333-41-5    | DIAZINON                                                     |   |   |   |  |  |  |   |   |  |   |   | x |   |   |  |   |
| 50-29-3     | DICHLORODIPHENYL<br>TRICHLOROETHANE<br>(DDT)                 |   |   |   |  |  |  |   |   |  |   | x |   |   | x |  | x |

|             |                                                                                                                                                                |   |   |   |  |   |   |   |   |  |   |   |   |  |  |   |  |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|--|---|---|---|---|--|---|---|---|--|--|---|--|
| 141-66-2    | DICROTOPHOS                                                                                                                                                    |   | x |   |  |   |   |   |   |  |   |   | x |  |  |   |  |
| 56073-07-5  | DIFENACOU                                                                                                                                                      | x |   |   |  |   |   |   |   |  | x |   |   |  |  |   |  |
| 60-51-5     | DIMETHOATE                                                                                                                                                     |   |   |   |  |   |   |   |   |  |   |   | x |  |  |   |  |
| 149961-52-4 | DIMOXYSTROBIN                                                                                                                                                  |   |   |   |  |   |   |   |   |  | x |   |   |  |  |   |  |
| 165252-70-0 | DINOTEFURAN                                                                                                                                                    |   |   |   |  |   |   |   |   |  |   |   | x |  |  |   |  |
| 82-66-6     | DIPHACINONE                                                                                                                                                    | x |   |   |  |   |   |   |   |  |   |   |   |  |  |   |  |
| 85-00-7     | DIQUAT (DIBROMIDE)                                                                                                                                             |   |   | x |  |   |   |   |   |  |   |   |   |  |  |   |  |
| 2439-10-3   | DODINE                                                                                                                                                         |   |   | x |  |   |   |   |   |  |   |   |   |  |  |   |  |
| 137-26-8    | DUSTABLE POWDER<br>FORMULATIONS<br>CONTAINING A<br>COMBINATION OF<br>BENOMYL AT OR ABOVE<br>7%, CARBOFURAN AT OR<br>ABOVE 10% AND<br>THIRAM AT OR ABOVE<br>15% |   |   |   |  |   |   |   |   |  |   |   |   |  |  | x |  |
| 155569-91-8 | EMAMECTIN BENZOATE                                                                                                                                             |   |   |   |  |   |   |   |   |  |   | x | x |  |  |   |  |
| 133855-98-8 | EPOXICONAZOLE                                                                                                                                                  |   |   |   |  |   |   |   | x |  |   |   |   |  |  |   |  |
| 66230-04-4  | ESFENVALERATE                                                                                                                                                  |   |   |   |  |   |   |   |   |  |   |   | x |  |  |   |  |
| 13194-48-4  | ETHOPROPHOS<br>(ETHOPROP)                                                                                                                                      | x |   | x |  |   |   |   |   |  |   |   |   |  |  |   |  |
| 75-21-8     | ETHYLENE OXIDE                                                                                                                                                 |   |   |   |  | x | x | x | x |  |   |   |   |  |  | x |  |
| 80844-07-1  | ETOFENPROX;<br>ETHOFENPROX                                                                                                                                     |   |   |   |  |   |   |   |   |  |   | x | x |  |  |   |  |
| 22224-92-6  | FENAMIPHOS                                                                                                                                                     |   | x | x |  |   |   |   |   |  |   |   | x |  |  |   |  |
| 120928-09-8 | FENAZAQUIN                                                                                                                                                     |   |   |   |  |   |   |   |   |  |   |   | x |  |  |   |  |
| 13356-08-6  | FENBUTATIN OXIDE                                                                                                                                               |   |   | x |  |   |   |   |   |  |   | x |   |  |  |   |  |
| 126833-17-8 | FENHEXAMID                                                                                                                                                     |   |   | x |  |   |   |   |   |  |   |   |   |  |  |   |  |
| 39515-41-8  | FENPROPATHRIN                                                                                                                                                  |   |   | x |  |   |   |   |   |  |   |   | x |  |  |   |  |

|             |                     |   |   |   |  |   |  |   |   |   |   |   |  |   |  |  |  |   |
|-------------|---------------------|---|---|---|--|---|--|---|---|---|---|---|--|---|--|--|--|---|
| 134098-61-6 | FENPYROXIMATE       |   |   | x |  |   |  |   |   |   |   |   |  |   |  |  |  |   |
| 76-87-9     | FENTIN HYDROXIDE    |   |   | x |  |   |  |   |   |   |   |   |  |   |  |  |  |   |
| 14484-64-1  | FERBAM              |   |   | x |  |   |  |   |   |   |   |   |  |   |  |  |  |   |
| 120068-37-3 | FIPRONIL            |   |   |   |  |   |  |   |   |   |   |   |  | x |  |  |  |   |
| 90035-08-8  | FLOCOUMAFEN         | x |   | x |  |   |  |   | x |   |   |   |  |   |  |  |  |   |
| 79622-59-6  | FLUAZINAM           |   |   | x |  |   |  |   |   |   |   |   |  |   |  |  |  |   |
| 272451-65-7 | FLUBENDIAMIDE       |   |   |   |  |   |  |   |   |   |   | x |  |   |  |  |  |   |
| 103361-09-7 | FLUMIOXAZIN         |   |   |   |  |   |  |   | x |   |   |   |  |   |  |  |  |   |
| 951659-40-8 | FLUPYRADIFURONE     |   |   |   |  |   |  |   |   |   |   |   |  | x |  |  |  |   |
| 69409-94-5  | FLUVALINATE         |   |   | x |  |   |  |   |   |   |   |   |  |   |  |  |  |   |
| 133-07-3    | FOLPET              |   |   | x |  |   |  |   |   |   |   |   |  |   |  |  |  |   |
| 50-00-0     | FORMALDEHYDE        |   |   |   |  | x |  |   |   |   |   |   |  |   |  |  |  |   |
| 98886-44-3  | FOSTIAZATE          |   |   |   |  |   |  |   |   |   |   |   |  | x |  |  |  |   |
| 100784-20-1 | HALOSULFURON-METHYL |   |   |   |  |   |  | x |   |   |   |   |  |   |  |  |  |   |
| 86479-06-3  | HEXAFLUMURON        |   |   |   |  |   |  |   |   |   |   |   |  | x |  |  |  |   |
| 138261-41-3 | IMIDACLOPRID        |   |   |   |  |   |  |   |   |   |   |   |  | x |  |  |  |   |
| 72963-72-5  | IMIPROTHRIN         |   |   |   |  |   |  |   |   |   |   |   |  | x |  |  |  |   |
| 173584-44-6 | INDOXACARB          |   |   |   |  |   |  |   |   |   |   |   |  | x |  |  |  |   |
| 91465-08-6  | LAMBDA-CYHALOTHRIN  |   |   | x |  |   |  |   |   |   |   |   |  | x |  |  |  |   |
| 330-55-2    | LINURON             |   |   |   |  |   |  |   | x |   |   |   |  |   |  |  |  |   |
| 103055-07-8 | LUFENURON           |   |   |   |  |   |  |   |   |   | x | x |  |   |  |  |  |   |
| 12057-74-8  | MAGNESIUM PHOSPHIDE |   |   | x |  |   |  |   |   |   |   |   |  |   |  |  |  |   |
| 121-75-5    | MALATHION           |   |   |   |  |   |  |   |   |   |   |   |  | x |  |  |  |   |
| 8018-01-7   | MANCOZEB            |   |   |   |  |   |  |   | x | x |   |   |  |   |  |  |  |   |
| 131-72-6    | MEPTYLDINOCAP       |   |   |   |  |   |  |   | x |   |   |   |  |   |  |  |  |   |
| 139968-49-3 | METAFLUMIZONE       |   |   |   |  |   |  |   |   |   | x | x |  | x |  |  |  |   |
| 16752-77-5  | METHOMYL            |   | x |   |  |   |  |   |   |   |   |   |  | x |  |  |  | x |

|             |                                       |   |   |   |  |  |   |   |   |  |   |   |   |   |  |   |  |
|-------------|---------------------------------------|---|---|---|--|--|---|---|---|--|---|---|---|---|--|---|--|
| 51596-10-2  | MILBEMECTIN                           |   |   |   |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 300-76-5    | NALED                                 |   |   |   |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 116714-46-6 | NOVALURON                             |   |   |   |  |  |   |   |   |  |   |   |   | x |  |   |  |
| 23135-22-0  | OXAMYL                                | x |   | x |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 64741-88-4  | PARAFFIN OILS;<br>MINERAL OILS        |   |   |   |  |  | x |   |   |  |   |   |   |   |  |   |  |
| 1910-42-5   | PARAQUAT DICHLORIDE                   |   |   | x |  |  |   |   |   |  |   |   |   |   |  | x |  |
| 40487-42-1  | PENDIMETHALIN                         |   |   |   |  |  |   |   |   |  | x | x |   |   |  |   |  |
| 52645-53-1  | PERMETHRIN                            |   |   |   |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 732-11-6    | PHOSMET                               |   |   |   |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 7803-51-2   | PHOSPHINE<br>(PHOSPHANE)              |   |   | x |  |  |   |   |   |  |   |   |   |   |  |   |  |
| 23103-98-2  | PIRIMICARB                            |   |   |   |  |  |   |   |   |  |   | x |   |   |  |   |  |
| 23031-36-9  | PRALLETHRIN                           |   |   |   |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 41198-08-7  | PROPENOFOS<br>(PROFENOFOS)            |   |   |   |  |  |   |   |   |  |   |   | x | x |  |   |  |
| 60207-90-1  | PROPICONAZOLE                         |   |   |   |  |  |   |   | x |  |   |   |   |   |  |   |  |
| 114-26-1    | PROPOXUR                              |   |   |   |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 75-56-9     | PROPYLENE OXIDE,<br>OXIRANE           |   |   |   |  |  | x | x |   |  |   |   |   |   |  |   |  |
| 96489-71-3  | PYRIDABEN                             |   |   |   |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 179101-81-6 | PYRIDALYL                             |   |   |   |  |  |   |   |   |  | x | x |   |   |  |   |  |
| 2797-51-5   | QUINOCLAMINE                          |   |   |   |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 148-24-3    | QUINOLIN-8-OL; 8-<br>HYDROXYQUINOLINE |   |   |   |  |  |   |   | x |  |   |   |   |   |  |   |  |
| 124495-18-7 | QUINOXYFEN                            |   |   |   |  |  |   |   |   |  | x |   |   |   |  |   |  |
| 83-79-4     | ROTENONE                              |   |   |   |  |  |   |   |   |  |   |   | x |   |  |   |  |
| 143-33-9    | SODIUM CYANIDE                        |   | x |   |  |  |   |   |   |  |   |   |   |   |  |   |  |
| 148477-71-8 | SPIRODICLOFEN                         |   |   |   |  |  | x |   |   |  |   |   |   |   |  |   |  |
| 57-24-9     | STRYCHNINE                            |   | x |   |  |  |   |   |   |  |   |   |   |   |  |   |  |

|             |                                                       |   |   |   |  |  |  |  |   |  |   |   |  |   |  |  |  |  |
|-------------|-------------------------------------------------------|---|---|---|--|--|--|--|---|--|---|---|--|---|--|--|--|--|
| 946578-00-3 | SULFOXAFLO                                            |   |   |   |  |  |  |  |   |  |   |   |  | x |  |  |  |  |
| 102851-06-9 | TAU-FLUVALINATE                                       |   |   | x |  |  |  |  |   |  |   |   |  |   |  |  |  |  |
| 21564-17-0  | TCMTB (2-<br>(THIOCYANATOMETHYL<br>HIO) BENZOTHAZOLE) |   |   | x |  |  |  |  |   |  |   |   |  |   |  |  |  |  |
| 107534-96-3 | TEBUCONAZOLE                                          |   |   | x |  |  |  |  |   |  |   |   |  |   |  |  |  |  |
| 96182-53-5  | TEBUPIRIMFOS                                          | x |   |   |  |  |  |  |   |  |   | x |  |   |  |  |  |  |
| 79538-32-2  | TEFLUTHRIN                                            |   | x |   |  |  |  |  |   |  |   |   |  | x |  |  |  |  |
| 13071-79-9  | TERBUFOS                                              | x |   |   |  |  |  |  |   |  |   |   |  |   |  |  |  |  |
| 22248-79-9  | TETRACHLORVINPHOS                                     |   |   |   |  |  |  |  |   |  |   |   |  | x |  |  |  |  |
| 7696-12-0   | TETRAMETHRIN                                          |   |   |   |  |  |  |  |   |  |   |   |  | x |  |  |  |  |
| 148-79-8    | THIABENDAZOLE                                         |   |   |   |  |  |  |  | x |  |   |   |  |   |  |  |  |  |
| 153719-23-4 | THIAMETHOXAM                                          |   |   |   |  |  |  |  |   |  |   |   |  | x |  |  |  |  |
| 59669-26-0  | THIODICARB                                            |   |   |   |  |  |  |  |   |  |   |   |  | x |  |  |  |  |
| 129558-76-5 | TOLFENPYRAD                                           |   |   |   |  |  |  |  |   |  | x |   |  |   |  |  |  |  |
| 731-27-1    | TOLYFLUANID                                           |   |   | x |  |  |  |  |   |  |   |   |  |   |  |  |  |  |
| 55219-65-3  | TRIADIMENOL                                           |   |   |   |  |  |  |  | x |  |   |   |  |   |  |  |  |  |
| 2303-17-5   | TRI-ALLATE                                            |   |   |   |  |  |  |  |   |  |   | x |  |   |  |  |  |  |
| 99387-89-0  | TRIFLUMIZOLE                                          |   |   |   |  |  |  |  | x |  |   |   |  |   |  |  |  |  |
| 1582-09-8   | TRIFLURALIN                                           |   |   |   |  |  |  |  |   |  | x |   |  |   |  |  |  |  |
| 81-81-2     | WARFARIN                                              |   | x | x |  |  |  |  | x |  |   |   |  |   |  |  |  |  |
| 1314-84-7   | ZINC PHOSPHIDE                                        |   | x |   |  |  |  |  |   |  |   |   |  |   |  |  |  |  |
| 137-30-4    | ZIRAM                                                 |   |   | x |  |  |  |  |   |  |   |   |  |   |  |  |  |  |

| Category 3  |                                | Human Health   |        |          |          |           |                    |                    |                     | Environmental Health |                                          | Pollinator Health                                       |                          | Int'l Conventions     |                 |                   |                 |
|-------------|--------------------------------|----------------|--------|----------|----------|-----------|--------------------|--------------------|---------------------|----------------------|------------------------------------------|---------------------------------------------------------|--------------------------|-----------------------|-----------------|-------------------|-----------------|
|             |                                | Acute Toxicity |        |          | Chronic  |           |                    |                    |                     |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| CAS #       | Pesticide                      | WHO 1a         | WHO 1b | GHS H330 | EPA carc | IARC carc | GHS+ carc (1A, 1B) | GHS+ muta (1A, 1B) | GHS+ repro (1A, 1B) | EU EDC               | very bio accumulative (POP criteria "B") | very pers in water, soil or sediment (POP criteria "P") | US EPA highly toxic bees | UC IPM Bee Precaution | Rotterdam (PIC) | Montreal Protocol | Stockholm (POP) |
| 500008-45-7 | CHLORANTRANILIPROLE            |                |        |          |          |           |                    |                    |                     |                      |                                          | x                                                       |                          |                       |                 |                   |                 |
| 20427-59-2  | COPPER (II) HYDROXIDE          |                |        | x        |          |           |                    |                    |                     |                      |                                          | x                                                       |                          |                       |                 |                   |                 |
| 62924-70-3  | FLUMETRALIN                    |                |        |          |          |           |                    |                    |                     |                      | x                                        |                                                         |                          |                       |                 |                   |                 |
| 77182-82-2  | GLUFOSINATE-AMMONIUM           |                |        |          |          |           |                    |                    | x                   |                      |                                          |                                                         |                          |                       |                 |                   |                 |
| 8003-34-7   | PYRETHRINS (PYRETHRUM EXTRACT) |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         | x                        | x                     |                 |                   |                 |
| 187166-15-0 | SPINETORAM                     |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |
| 168316-95-8 | SPINOSAD                       |                |        |          |          |           |                    |                    |                     |                      |                                          |                                                         | x                        |                       |                 |                   |                 |

## References

---

1. PAN International List of Highly Hazardous Pesticides. (2015). *Pesticide Action Network International*. Retrieved from [http://www.pan-germany.org/download/PAN\\_HHP\\_List\\_150602\\_F.pdf](http://www.pan-germany.org/download/PAN_HHP_List_150602_F.pdf)
2. Pesticide Action Network (PAN) Dirty Dozen Pesticides. *Pesticide Action Network North America*. Retrieved from [http://www.pesticideinfo.org/Docs/ref\\_toxicity7.html#DirtyDozen](http://www.pesticideinfo.org/Docs/ref_toxicity7.html#DirtyDozen)
3. Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, Annex III Chemicals. *Rotterdam Convention*. Retrieved from <http://www.pic.int/Default.aspx?tabid=1132>
4. Stockholm Convention on Persistent Organic Pollutants (POP), Annexes A, B, and C Chemicals. *Stockholm Convention*. Retrieved from <http://chm.pops.int/TheConvention/ThePOPs/ListingofPOPs/tabid/2509/Default.aspx>
5. The WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification. (2009). *The World Health Organization (WHO)*. Retrieved from [http://www.who.int/ipcs/publications/pesticides\\_hazard\\_2009.pdf](http://www.who.int/ipcs/publications/pesticides_hazard_2009.pdf)