

# **Strategies and the Feasibility of Implementing a Bylaw to Ban the use of Cosmetic Pesticides in Revelstoke**

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## **Introduction**

Concerns regarding the risk to human health and the environment associated with the use of cosmetic pesticides have been brought to the attention of City Council on a number of occasions over the past ten years.<sup>1</sup>

In 1996, the City of Revelstoke stopped using pesticides on City Parks and dramatically reduced their use on city-owned sports fields. In June 2009 their use was discontinued completely.

A request was made to City Council on February 23, 2010 by the City's Environmental Advisory Committee and the North Columbia Environmental Society to implement a Bylaw to ban the use of cosmetic pesticides city-wide. Letters of support were received from six groups and organizations which included School District #19, Selkirk Medical Clinic, Interior Health, Illecillewaet Greenbelt Society, Friends of Mt. Revelstoke and Glacier National Park and the Rod and Gun Club. Additionally, a petition signed by 71 residents was presented to Council on July 6 supporting the City's discontinued use of cosmetic pesticides on public lands and supporting a Bylaw to extend the ban city-wide.

The purpose of this report is to provide City Council with information on cosmetic pesticides, their regulation, potential health concerns, and on strategies and the feasibility of implementing a Bylaw to prohibit their use in Revelstoke.

## **What are Cosmetic Pesticides?**

A pesticide is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating a pest. This includes herbicides, insecticides, fungicides, and other substances to control pests. The term "cosmetic pesticide use" is often used to refer to lawn care pesticides that are being used for esthetic purposes only. Commonly used cosmetic pesticides include Kill Ex, Feed Ex, Weed 'n Feed and Roundup.

## **Pesticide Regulation in Canada**

All pesticides must be registered before they can be imported, manufactured, sold or used in Canada. Health Canada's Pest Management Regulatory Agency is responsible for pesticide registration and assessing human health, safety, and environmental impacts. The Provincial and

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<sup>1</sup> City of Revelstoke, City Council minutes 2001, [http://www.cityofrevelstoke.com/admin/minutes\\_2001/minutes04-09-01.htm](http://www.cityofrevelstoke.com/admin/minutes_2001/minutes04-09-01.htm)

Territorial governments can further regulate the sale of pesticides and place restrictions on their use on public lands and certain types of private properties. At the municipal level, a government can adopt a Bylaw that regulates the use of pesticides on municipal and private residential lands only.<sup>2</sup>

### **Pest Management Regulatory Agency and Lawn Pesticides**

All pesticides that are registered in Canada have undergone epidemiology and toxicity studies to meet the health and safety requirements of the Pest Management Regulatory Agency.

Health Canada is currently conducting a re-evaluation of all pesticides registered before January 1, 1995 to ensure they meet modern health and safety standards. On September 27, 2000, Health Canada announced the priority re-evaluation of the eight most commonly available lawn pesticides as part of their action plan on the use of urban pesticides. The eight pesticides included four insecticides and four herbicides.

Of the four insecticides tested for lawn and turf use, two were phased out and one was voluntarily discontinued by the registrant. The last, Carbaryl, is still under review by Health Canada.

The four herbicides that were re-evaluated by Health Canada are Racemic mecoprop, Dicamba, MCPA and 2,4-D and the following recommendations were made:

Racemic mecoprop – The racemic mixture products have been phased out and a reformulated product mecoprop-p has been registered.

Dicamba – Lawn and turf uses were proposed as acceptable.

MCPA – Lawn and turf uses were proposed as acceptable.

2,4-D – As a result of the re-evaluation, Health Canada has required additional protective measures be required which include:

- Updated label instructions/statements to protect users/applicators and to minimize their exposure.
- Updated label instructions/statements to minimize the release of 2,4-D into the environment as well as to protect sensitive aquatic and terrestrial habitats.
- The diethanolamine (DEA) form of 2,4-D has been phased out due to a lack of adequate data for assessment.
- Products for aquatic uses are being phased out as the risks exceed current health and environmental standards.

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<sup>2</sup> Health Canada, The Regulation of Pesticides in Canada, <http://www.hc-sc.gc.ca/cps-spc/pubs/pest/fact-fiche/reg-pesticide/index-eng.php>, assessed June 24, 2010

Health Canada has concluded that 2,4-D can be used safely for lawn and turf use, provided updated label directions are followed.<sup>3</sup>

The lawn care products Feedex, Killlex and Weed and Feed contain a combination of 2,4-D, Meoprop-P and Dicamba. The Weed Ex dandelion bar contains only 2,4-D.

### **Health Concerns Related to Pesticides**

Health concerns related to the exposure of pesticides have been widely documented to indicate a potential link between chronic pesticide exposure and specific cancers, neurological disorders and endocrine disruption.<sup>4</sup>

The Canadian Cancer Society states,

“We are very concerned about the cosmetic and non essential use of potentially cancer-causing substances on green spaces. The Canadian Cancer Society calls for a ban on the use and sale of cosmetic pesticides. Our position is based on the growing body of evidence suggesting a connection between pesticides and cancer. The cosmetic use of pesticides may cause harm and provides no health benefit. According to the precautionary principle, when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause-and-effect relationships are not fully established scientifically. Our call for a ban does not apply to using pesticides in agriculture to grow food, using pesticides to ensure public health and safety and using pesticides to prevent environmental damage. In these instances, the issue is much more complex since there can be health benefits in controlling pests.”<sup>5</sup>

The Canadian Medical Association has also spoken out against the use of cosmetic pesticides,

“The Canadian Medical Association urging all levels of government to show leadership by refraining from the cosmetic use of pesticides and aggressively employing safer alternatives to the use of chemicals. They have also urged all levels of governments to undertake a public education program to increase awareness of the potential risks associated with the cosmetic use of pesticides and to promote safer alternatives to the use of chemicals. The Canadian Medical Association encourages all levels of government to promote safe and rational pesticide use by using the

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<sup>3</sup> Health Canada, Questions and Answers – Final Decision on the Re-evaluation of 2,4-D, [http://www.hc-sc.gc.ca/cps-spc/pest/part/protect-proteger/use-utiliser/\\_24d/24d-faq-eng.php](http://www.hc-sc.gc.ca/cps-spc/pest/part/protect-proteger/use-utiliser/_24d/24d-faq-eng.php), assessed June 25, 2010

<sup>4</sup> *Pesticides Literature Review*, Ontario College of Family Physicians (April 2004). <http://www.ocfp.on.ca/local/files/Communications/Current%20Issues/Pesticides/Final%20Paper%2023APR2004.pdf>, assessed July 10, 2010

<sup>5</sup> Canadian Cancer Society, [http://www.cancer.ca/Canadawide/Prevention/Specific%20environmental%20contaminants/Pesticides/Cosmetic%20of%20pesticides.aspx?sc\\_lang=en](http://www.cancer.ca/Canadawide/Prevention/Specific%20environmental%20contaminants/Pesticides/Cosmetic%20of%20pesticides.aspx?sc_lang=en), assessed June 22, 2010

precautionary principle in determining the impact of pesticides, including insecticides, herbicides and fungicides.”<sup>6</sup>

### **Cosmetic Pesticide Reduction Plans and Bans**

As a result of concerns from communities across Canada over the use of cosmetic pesticides, Health Canada, working in partnership with provincial and territorial governments between 2001 and 2006, developed the *Healthy Lawns Strategy for Urban Pesticide Risk Reduction*.<sup>7</sup> The aim of this strategy is to help Canadians reduce their reliance on pesticides for lawn care. The strategy emphasizes Integrated Pest Management principles, such as pest prevention, the use of reduced risk products, and the application of pesticides only when necessary.

More recently, there has been a growing movement to ban the use of cosmetic pesticides at the provincial and municipal levels. Both Quebec<sup>8</sup> and Ontario<sup>9</sup> have banned the use of cosmetic pesticides as a result of concerns for public health and the environment. A proposed ban for Nova Scotia is planned to take effect in 2011.<sup>10</sup> The provinces of New Brunswick<sup>11</sup> and PEI<sup>12</sup> have chosen to place restrictions on lawn pesticides to promote consumer safety by reducing the potential for their misuse or over-use. Currently 168 municipalities in Canada have adopted bylaws to regulate the use of pesticides.<sup>13</sup>

### **Pesticide Regulation in British Columbia**

In August 2009, the province of British Columbia committed to consult the public on the use of cosmetic pesticides. The results of public consultation have been summarized and are currently being considered to determine how to proceed.<sup>14</sup>

Presently, 31 municipalities in BC have adopted bylaws to regulate the use of pesticides.<sup>15</sup> Bylaws and experiences from the communities of Invermere, Salmon Arm and Fernie were reviewed to gain a better understanding of how to implement such a bylaw in Revelstoke and possible challenges that may exist. These communities were chosen based on similarities in size, location, and demographic to Revelstoke.

<sup>6</sup> Canadian Medical Association [http://www.cma.ca/index.php?ci\\_id=53670&la\\_id=1](http://www.cma.ca/index.php?ci_id=53670&la_id=1), assessed June 22, 2010

<sup>7</sup> Health Canada <http://www.hc-sc.gc.ca/cps-spc/pest/part/protect-proteger/use-utiliser/lawn-pelouse/index-eng.php>, assessed July 8, 2010.

<sup>8</sup> Government of Quebec <http://www.mddep.gouv.qc.ca/pesticides/permis-en/code-gestion-en/index.htm>, assessed July 9, 2010.

<sup>9</sup> Ontario Ministry of the Environment <http://www.ene.gov.on.ca/en/land/pesticides/index.php> assessed July 8, 2010

<sup>10</sup> Nova Scotia Environment <http://www.gov.ns.ca/news/details.asp?id=20100504003>, assessed July 11, 2010

<sup>11</sup> New Brunswick, Environment <http://www.gnb.ca/cnb/news/env/2009e0865ev.htm>, assessed July 13, 2010

<sup>12</sup> Department of Environment, Energy and Forestry, Prince Edward Island

<http://www.gov.pe.ca/eef/index.php3?number=1030236&lang=E>, assessed July 8, 2010

<sup>13</sup> Private Property Pesticide by-laws in Canada, Mike Christie, updated May 9, 2010,

<http://www.flora.org/healthyottawa/BylawList.pdf> assessed July 9, 2010.

<sup>14</sup> Ministry of the Environment, Cosmetic use of pesticides in British Columbia

<http://www.env.gov.bc.ca/epd/ipmp/regs/cosmetic-pesticides/consultation.htm>

<sup>15</sup> Pesticide Free BC, <http://www.pesticidefreebc.org>

### **District of Invermere**

In conversation with Chris Prouser, Chief Administration Officer for the District of Invermere, a Bylaw to regulate the use of cosmetic pesticides was adopted February 2010.

The District of Invermere entered a partnership with Wildsight and the local chapter of the Canadian Cancer Society to undertake a one year consultation on the use of cosmetic pesticides. The District of Invermere funded public information sessions and speakers. An event, "How to Get Your Lawn Off Drugs" was attended by 800 people including local landscaping companies and hardware stores. Home Hardware and Rona have chosen to discontinue the sale of chemical cosmetic pesticides. In conjunction with the Canadian Cancer Society and Wildsight they have founded the Pesticide Free Columbia Valley Coalition. There was no opposition from residents in Invermere to the adoption of the Bylaw. The only opposition came from a landscape company in Cranbrook that had clients in Invermere. An educational pamphlet that details options other than chemical cosmetic pesticides was created and given to residents. The District of Invermere is monitoring the Bylaw and are hoping that residents will inform the District of any use by their neighbours and that the use of cosmetic pesticides will stop as a result of peer pressure.

### **City of Salmon Arm**

In conversation with City Councilor Debbie Cannon, a Bylaw to regulate the use of cosmetic pesticides was adopted in October 2008. A group of Salmon Arm physicians presented a petition to Council requesting that a ban be put in place. A committee was formed and an education campaign regarding the ban was put in place, including a note on the taxation notice, radio ads, and posters. A survey of approximately 1400 residents indicated overwhelming support. There was no opposition at the public hearing, but following the adoption of the Bylaw there was opposition from local landscaping and integrated pest management companies. The companies were given a one year grace period to find alternates. Following the year they continue to be unhappy with the bylaw. There aren't any provisions for enforcement in the bylaw.

### **City of Fernie**

In conversation with Allan Chabot, Chief Administration Officer for the City of Fernie, a Bylaw to regulate the use of cosmetic pesticides was adopted March 2010. The City of Fernie implemented an Integrated Pest Management task force to study the possibility of implementing a Bylaw. The task force included members of the public, golf course, City Parks department and Wildsight. After two years of study, the task force recommended City Council proceed with education regarding health concerns related to the use of cosmetic pesticides. Council did not have a budget for education and decided based on what other communities were doing and the "precautionary principal" to enact a bylaw prohibiting the use of cosmetic pesticides. They have received a few letters from residents that are not happy with the bylaw. The loudest opposition has been from a lawn care company in Cranbrook. There are enforcement provisions in the bylaw and a process to apply for exemption. The hope is that with regulation, the majority of residents will choose to abide to the bylaw. City Council has since established a budget for ongoing education.

## **A Cosmetic Pesticide bylaw for Revelstoke**

The attached bylaw (Appendix 1 ) was drafted for the City of Revelstoke based on a review of the bylaws from the above mentioned communities. It is important to note that sections 8(3)(j) and 9 of the Community Charter and BC Reg. 144/2004 (Spheres of Concurrent Jurisdiction – Environment and Wildlife Regulation) allow for a municipality to regulate the use of pesticides on public owned land that is vested in the City and on privately owned land that is used for residential purposes. A municipality does not have the ability to regulate the use of pesticides on privately owned commercial properties or land that is provincially owned, such as schools or hospitals.

### **Considerations:**

#### **Revelstoke Golf Course**

Since the Revelstoke Golf Course is city-owned, this Bylaw could apply. It is difficult to determine how realistic it is for golf courses to function without the use of any pesticides. In Ontario, golf courses are exempt from the provincial ban and can use pesticides on playing fields provided they have an Integrated Pest Management Plan as well as provide an annual public report detailing why and when pesticides were used.<sup>16</sup>

In conversation with the Revelstoke Golf Course Superintendent Jarod Burke, it is necessary to use fungicides to maintain the greens and fairways. They are used sparingly and only when necessary. They do not use any herbicides and have gone as long as 12 months without using fungicides.

#### **Local Landscaping Companies**

To determine whether such a bylaw would impact local landscaping business, the following businesses were contacted: Mountain Devas, Thors Lawn and Yard Maintenance, Indigo Garden and Landscaping, Kelly's Bobcat, and SPM Landscaping. Each business was asked if they use cosmetic pesticide and whether a Bylaw banning their use would impact their business. One business uses Round-Up for one client each year, but felt other options could be used. Another business is using cosmetic pesticides on request, but encourages corn gluten in the spring and other non chemical lawn care methods and felt a Bylaw would not impact their business. The other three companies do not use any pesticides and Kelly's Bobcat has recently opened a store across from Rona called KBS Landscaping Supplies, which sells only eco friendly products.

### **Potential Opposition**

It is difficult to determine what if any opposition there would be from the residents of Revelstoke to this Bylaw. As indicated earlier, letters of support from six groups/organizations, as well as from the City's Environmental Advisory committee and the North Columbia Environmental Society, and a petition signed by 71 residents supporting such a city wide bylaw was received by City Council. A community environmental awareness survey done by the North Columbia Environmental Society in 2009 indicated that 92% (n=392) of respondents were concerned about the potential effects of cosmetic pesticides on human health and ecosystems. When asked if the

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<sup>16</sup> Ontario Golf Courses and a Ban on Cosmetic Pesticides.  
<http://www.ene.gov.on.ca/en/land/pesticides/factsheets/fs-golfcourses.pdf>

City of Revelstoke should ban chemical cosmetic pesticides on residential land, 68% (n=413) responded yes. For the results of other questions from this report that pertain to pesticides see Appendix 2.

### **Enforcement**

Provisions for enforcement and penalties have been omitted from the draft bylaw at this time. It can be difficult to enforce such a bylaw. Invermere is relying on residents to report their neighbours and the hope that people will comply with the Bylaw.

### **Strategies for Implementation of the Bylaw**

It was indicated by the communities contacted that it is important to provide public education and awareness of the potential hazards from pesticides and educate of alternative options. A pamphlet used by the City of Salmon Arm (Appendix 3) and an information sheet listing alternatives to cosmetic pesticides from the District of Invermere (Appendix 4) are included.

An education and awareness campaign in Revelstoke could include the following messaging and means of reaching residents:

1. Raise awareness of the potential health concerns expressed by the Canadian Cancer Society and Canadian Medical Association.
2. Social responsibility for the health of all residents and the environment.
3. Awareness of the City's choice to stop using pesticides on city fields, encouraging residents to take the City's lead.
4. Information on how to create a healthy robust lawn that is less susceptible to weeds.
5. Re-evaluation of what a healthy lawn should look like (i.e. Tolerance for some weeds).
6. Information on environmentally friendly alternative to chemical pesticides.
7. Raise awareness of the Bylaw through an education pamphlet, a fact sheet on the City website and newspaper ads.
8. Engage residents through a public meeting, inviting local landscaping companies, the Canadian Cancer Society and the Revelstoke Golf Course grounds keeper.
9. Ensure an understanding that the bylaw only pertains to pesticides used for cosmetic or esthetic purposes and is not intended to prohibit pesticide use where a health hazard exists.

### **Conclusion**

Municipalities have the ability to regulate the use of cosmetic pesticides on city owned land and on privately owned residential land. As a result of potential health and environmental concerns related to pesticide exposure many provinces and municipalities have chosen to regulate the use of pesticides used for cosmetic or esthetic purposes. The residents of Revelstoke appear to support such a Bylaw, and the opposition from local landscaping companies seen in other communities does not exist in Revelstoke. It is important to include an education and public awareness campaign to accompany the bylaw which emphasizes the potential health and environmental affects of chemical cosmetic pesticides and provides for alternative options.

## Appendix 1 - Draft Bylaw for the City of Revelstoke

### CITY OF REVELSTOKE BYLAW NO. \_\_\_\_\_

#### **A Bylaw to regulate the non - essential use of Pesticides as a means of improving or maintaining the appearance of lawns, gardens, hard landscapes and vegetated lands within the City of Revelstoke**

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**WHEREAS** the residents of the City of Revelstoke are concerned about the non-essential use of pesticides and the risks that they may pose to the health and well being of the environment and residents.

**AND WHEREAS** the Council is authorized to establish a Bylaw to regulate the cosmetic use of Pesticides as a means of improving or maintaining the appearance of lawns, gardens, hard landscapes and vegetated lands pursuant to the *Community Charter* and the *Spheres of Concurrent Jurisdiction – Environment and Wildlife Regulation*.

**NOW THEREFORE** the Municipal Council of the City of Revelstoke in an open meeting assembled enacts as follows:

#### **1. TITLE:**

This bylaw may be cited for all purposes as "Pesticide Use Bylaw No. \_\_\_\_\_ 2010".

#### **2. DEFINITIONS:**

(1) In this Bylaw,

(b) "Bylaw Enforcement Officer" means bylaw enforcement officer, Commissionaires and Building Inspectors.

(c) "City" means the City of Revelstoke.

(d) "Council" means the Council of the City of Revelstoke.

(f) "Permitted Pesticide" means a Pesticide as listed in Schedule 2 of the Integrated Pest Management Regulation (BC Reg. 604/2004).

(g) "Pest" means an injurious, noxious or troublesome living organism, but does not include virus, bacteria, fungus or internal parasite that exists on or in humans or animals.

(h) "Pesticide" means a micro-organism or material that is represented, sold, used or intended to be used to prevent, destroy, repel, mitigate a pest, and includes but is not limited to:

- (i) a plant growth regulator, plant defoliator or plant desiccant,
- (ii) a control product as defined in the Pest Control Products Act (Canada), and
- (iii) a substance that is classified as a pesticide by the Integrated Pest Management Act (British Columbia).



(i) "Private Land" means a parcel or a part of a parcel if the parcel or part is used for residential purposes in the City of Revelstoke but does not include residential area of farms

(j) "Public Lands" means land that is vested in the City of Revelstoke.

## **2. REGULATION:**

No person shall use or apply a Pesticide or grant the permission or authority, express or implied, to use or apply pesticide for the purpose of maintaining outdoor trees, shrubs, flowers, other ornamental plants and turf on, in, under or upon any Private Land or Public Land.

## **3. EXEMPTIONS:**

5.1 This Bylaw shall not apply in respect of:

- (a) the use or application of permitted pesticide as listed in Schedule "A";
- (b) Golf courses on city owned land managed by a certified Integrated Pest Management (IPM) practitioner with a valid pesticide applications certificate;
- (c) the application of pesticides to control noxious weeds throughout the City after alternatives have been utilized without success (see provincial regulation BC Weed Control Act for defined noxious weed);
- (d) the application of pesticides to control or destroy a health hazard;
- (e) the use of pesticides in a public or private swimming pool;
- (f) purification of water intended for the use of human beings or animals;
- (g) use inside a building; and
- (h) the application of pesticides to control ants, termites, and wasps.

## **4. ENFORCEMENT:**

(1) Bylaw is designated under the provisions of Section 264 of the Community Charter as a Bylaw that may be enforced by means of a ticket in the form prescribed, and in accordance with this Bylaw.

(2) Bylaw Enforcement Officers are designated to enforce this Bylaw pursuant to Section 264(1)(b) of the Community Charter

## **5. SEVERABILITY:**

If any section of this Bylaw is held to be invalid by a Court of competent jurisdiction, then such invalid portion shall be severed and such decision shall not affect the validity of the remainder of the Bylaw.

**6. OFFENCE:**

**7. PENALTY:**

**8. EFFECTIVE DATE:**

This bylaw comes in full force and effect and is binding on all persons as and from the date of adoption.

READ A FIRST TIME THIS DAY OF 2010

READ A SECOND TIME THIS DAY OF 2010

READ A THIRD TIME THIS DAY OF 2010

ADOPTED THIS DAY OF 2010

\_\_\_\_\_  
Director of Corporate Administration

\_\_\_\_\_  
Mayor

*Certified a true copy this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.*

## Schedule "A"

The following substances are Permitted Pesticides and shall be excluded from the provisions of this Bylaw (Source: Integrated Pest Management Regulation, B.C. Reg. No. 604/2004, Schedule 2 – Excluded Pesticides, as at December 18, 2008):

### Schedule 2 - Excluded Pesticides

- 1 acetic acid (DOMESTIC)
- 2 animal repellents (DOMESTIC and COMMERCIAL) except thiram
- 3 anti-fouling paints (DOMESTIC and COMMERCIAL)
- 4 antispain wood preservatives used on private, industrial land owned by the company or person responsible for the application (COMMERCIAL)
- 5 asphalt solids (pruning paints) (DOMESTIC and COMMERCIAL)
- 6 bacillus thuringiensis kurstaki (Btk) (DOMESTIC)
- 7 bactericides used in petroleum products (DOMESTIC and COMMERCIAL)
- 8 boron compounds (DOMESTIC)
- 9 boron compounds with up to 5% copper for insect control and wood preservation (COMMERCIAL)
- 10 capsaicin (DOMESTIC, COMMERCIAL and RESTRICTED)
- 11 cleansers (DOMESTIC and COMMERCIAL)
- 12 corn gluten meal (DOMESTIC and COMMERCIAL)
- 13 d-phenothryn (DOMESTIC)
- 14 d-trans-allethrin, also referred to as d-cis, trans allethrin (DOMESTIC)
- 15 deodorizers (DOMESTIC and COMMERCIAL)
- 16 fatty acids (DOMESTIC)
- 17 ferric phosphate (DOMESTIC and COMMERCIAL)
- 18 ferrous sulphate (DOMESTIC and COMMERCIAL)
- 19 hard surface disinfectants (DOMESTIC and COMMERCIAL)
- 20 insect bait stations (DOMESTIC)
- 21 insect pheromones (DOMESTIC and COMMERCIAL)
- 22 insect repellents (DOMESTIC)
- 23 laundry additives (DOMESTIC and COMMERCIAL)
- 24 material preservatives (DOMESTIC and COMMERCIAL)
- 25 methoprene (DOMESTIC)
- 26 mineral oils for insect and mite control (DOMESTIC)
- 27 n-octyl bicycloheptene dicarboximide (DOMESTIC)
- 28 naphthalene for fabric protection (DOMESTIC)
- 29 paradichlorobenzene for fabric protection (DOMESTIC)
- 30 pesticides in aerosol containers (DOMESTIC)
- 31 pesticides registered under the federal Act for application to pets (DOMESTIC and COMMERCIAL)

- 32 piperonyl butoxide (DOMESTIC)
- 33 plant growth regulators (DOMESTIC)
- 34 polybutene bird repellents (DOMESTIC and COMMERCIAL)
- 35 pyrethrins (DOMESTIC)
- 36 resmethrin (DOMESTIC)
- 37 rotenone (DOMESTIC)
- 38 silica aerogel, also referred to as silica gel, amorphous silica and amorphous silica gel (DOMESTIC and COMMERCIAL)
- 39 silicon dioxide, also referred to as "diatomaceous earth" (DOMESTIC and COMMERCIAL)
- 40 slimicides (COMMERCIAL)
- 41 soaps (DOMESTIC and COMMERCIAL)
- 42 sulphur, including lime sulphur, sulphide sulphur and calcium polysulphide (DOMESTIC)
- 43 surfactants (DOMESTIC and COMMERCIAL)
- 44 swimming pool algicides and bactericides (DOMESTIC and COMMERCIAL)
- 45 tetramethrin (DOMESTIC)
- 46 wood preservatives (DOMESTIC)