



# Canadian Environmental Law Association

June 9, 2004

Hon Pierre Pettigrew Minister of Health Brooke Claxton Bldg, Tunney's Pasture PL 0906C Ottawa, ON K1A 0K9

Dear Mr. Pettigrew:

# Re: Response to the Pest Control Products Sales Information Reporting Regulations: Canada Gazette March 27, 2004

Thank you for the opportunity to comment on the proposed Pest Control Products Sales Information Reporting Regulations. The Regulations represent a necessary first step in estimating pesticide use, that can allow regulators to better access exposures, risk use patterns, and more effectively protect human health and the environment. It is also a long-awaited measure to ensure Canadians have access to information regarding the use of pesticides.

WWF and CELA generally support the proposed Regulations, specifically that:

- information will be collected on end-use products, as well as active ingredients and manufacturing concentrates. Keeping track of sales on this basis will provide more complete information on the total amount of pesticides sold annually.
- the Regulations will also require registrants to collect data on fertilizer-pesticide, feed-pesticide, and seed treatment products; without these data, information regarding a significant amount of pesticide usage would be misread.
- sales data will be collected for products with emergency or temporary registration.
- data will be reported province by province which facilitates tracking trends in sales, patterns, risk, etc. on a regional basis.

However, we have a number of concerns with the proposed Regulations. A major and overarching concern, which WWF has expressed on numerous occasions, is that pesticide sales are an inadequate

surrogate for pesticide use. As set out in section 7 of this letter, we recommend that there be a firm commitment in the Regulation for the collection of use data for the 2008 calendar year.

WWF and CELA request and urge that Regulations be amended to address several gaps and flaws in the interest of improving the quality and usefulness of information gathered and reported for protecting health and the environment.

#### 1. Three additional categories of pesticide sales data are needed.

- a. Sales data for so-called minor use products should be tracked separately. Our concern is that sales of active ingredients registered initially for "minor uses" may grow over time as new uses are added, to the point where they are similar to sales of active ingredients registered for 'major uses'.
- b. Sales data for formulants that are considered to be of toxicological significance should be collected and available to the public. The presence of these ingredients in pesticide products is no longer considered confidential business information (CBI) under the new PCPA. Reporting and availability of these data would facilitate more accurate tracking of risk as well as environmental and epidemiological research.
- c. Sales data (volume or weight) of POPs micro contaminants should be provided as a subset of the sales data for each product containing such micro-contaminants. Making an inventory of POPs micro contaminants is a requirement of the Stockholm Convention on Persistent Organic Pollutants, which entered into force on May 17, 2004, and to which Canada is a signatory. This Regulation provides the necessary vehicle to track these data.

**Recommendation #1:** Sections 3, 4 and 5 should be amended to require submission of sales data and separate tracking of minor use products, formulants of toxicological significance and POPs micro contaminants.

# 2. A methodology must be specified for aggregating sales data by sub-category where there is only one registrant for an end use product.

The method of aggregating sales data for active ingredients that have only one or a few registrants to ensure that the monetary value of pesticide sales will not be disclosed, is not stated. The discussion notes for the proposed Regulations state that 2.5% of pesticide end-use products (EPs) would require some form of aggregation to avoid revealing confidential business information. While this is an acceptable maximum aggregation target, it should be more firmly entrenched. It is essential that the method of aggregation be clearly stated to meet it. Our specific concern is that depending on the way on which sales data are aggregated, a much higher percentage (>2.5%) of EPs could have their sales data undisclosed. For example, if there were only one registrant with products containing a particular synthetic pyrethroid, sales data for these product(s) could be reported under the category of 'miscellaneous insecticide', to provide anonymity and protection of CBI. However, if sales data for this particular synthetic pyrethroid data were to be aggregated into the whole class of synthetic pyrethroids, then there would be no detailed information on individual synthetic pyrethroids such as deltamethrin and cypermethrin.

**Recommendation #2:** The Regulations should be amended to require PMRA to develop, by April 30, 2005, a methodology to aggregate end-use product data in cases where there is only one or a few

registrants per active ingredient. The methodology should provide sufficient protection of CBI, ensure that no more than 2.5% of EPs are aggregated, ensure that there is no aggregation of sales data for individual active ingredients with more than one or a few manufacturers, and be statistically valid.

## 3. Shorten the timeline for provision of data in dangerous situations.

In Section 9, it is stated that registrants must provide records to the Minister "for the purpose of responding to a situation that endangers human health or safety or the environment or of making a decision under the Act", and a timeline of 15 calendar days is provided for receipt of these records. A tighter timeframe of 7 days should be required for endangering situations.

**Recommendation #3**: Section 9 should be amended to require these records to be required within 7 days, if situations are truly endangering.

### 4. Interim sales information submitted by registrants must be subject to a third party audit.

While the Minister would be empowered by the Regulations to require a third party audit of submitted information reasonably considered to be incomplete or inaccurate, Section 12(2) explicitly exempts information provided in the type of situation described in Section 9 from such an audit. We fundamentally disagree with this approach.

**Recommendation #4:** Section 12 should be amended to ensure that there will be no exclusions from a third party audit of any information submitted under the Regulations.

#### 5. The methodology to be used by registrants to 'estimate' sales must be pre-approved.

WWF recognizes that provisions to allow for estimates are necessary in certain circumstances. PMRA will require registrants to provide written evidence of the methodologies used to provide estimates of sales data in cases where the registrant "does not have actual information on sales by distributors to vendors or users or on the quantities made available for sale to users in the form of products regulated under the *Feeds Act* or the *Fertilizers Act* or in the form of treated seeds". With this regulatory power, PMRA can ensure that methodologies devised by different registrants are not only credible and reliable, but that they are standardized sufficiently to facilitate easy analysis and interpretation of results.

**Recommendation** #5: Section 10 should be amended to require PMRA to develop, based on submissions and consultation, by April 30, 2005, methodologies for collection and analysis of 'estimated' sales data to ensure data consistency and comparability.

#### 6. Sales estimates should not be treated as reliable indicators of pesticide use.

The discussion of the proposed Regulations in the Gazette states that a two-part evaluation of initiatives to improve the pesticide regulatory system will be conducted in 2004-05 and 2006-07, and that information on sales "will contribute to the evaluation itself as an indicator of risk reduction trends." However, as proposed in the Regulations, registrants have a five-year 'grace' period during which they can provide pesticide sales data based on estimates (a period that will presumably end in

2009). WWF believes that limited credibility can be given to indicators of risk reduction trends that are based on registrant estimates of sales when even registrants indicate that sales data are inaccurate compared to uses data. The analyses should separate results based on estimates and actual sales data. and data trends should be strongly qualified because of the lack of certainty in estimated sales data.

**Recommendation #6:** The Regulations should be amended to require that any analyses of sales data conducted by the PMRA during the period in which registrants are provided estimates of their pesticide sales is clearly acknowledged. The analyses should separate results based on estimates and actual sales data and trends should be strongly qualified because of the lack of certainty in estimated sales data.

# 7. Collection and reporting of pesticide use data should be initiated by 2008 to validate and complement sales data.

WWF has stated in earlier communications that we consider sales data to be a weak proxy for use data. There should be a requirement to institute a nation-wide system for collection and public reporting of pesticide *use* data beginning in the 2008 calendar year.

There are many compelling reasons why collection of use information is preferable to collection of sales data, some of which have been outlined in previous correspondence from WWF on this issue, and which were raised in the course of WWF's participation in the working group on this matter. Disadvantages of sales data, from the point of view of conducting meaningful analyses of risk reduction efforts, epidemiological research, environmental risk, and other analyses include:

- Most chemicals are not specific to single crops and sales data are therefore inadequate for sophisticated usage and risk reduction figures.
- Sales figures often provide little, if any, information on regional differences in use.
- Total sales may include sales into sectors outside agriculture, for example weed control in industry or on public areas (roads, pavements, parks, etc.), sports grounds, homes and gardens.
- Data on weights or volumes sold cannot be converted accurately to area treated, i.e. use. Many farmers apply pesticides at well below the recommended rate, leading to grossly underestimated areas treated if they were to be calculated from the amount applied simply divided by recommended rate. Experience in the UK suggests that farmer uptake of reduced rates varies regionally and is influenced by enterprise size, further complicating any attempt to predict area treated using sales data.

Important reasons why site-specific pesticide use data is vital include that:

 Without accurate and site-specific information on the pesticides that people are exposed to, health researchers find it very difficult to understand the relationship between exposure and illness. That's why the American Medical Association<sup>1</sup> has called for improved reporting systems for pesticide usage and pesticide-related illnesses.

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<sup>&</sup>lt;sup>1</sup> American Medical Association, Council on Scientific Affairs. 1997. Educational and informational strategies to reduce pesticide risks. *Preventive Medicine* 26:191-200.

- Pesticides are widely found in rivers, streams, and wells in both urban and rural areas across Canada. Site-specific data on pesticide use would help identify water supplies at the greatest risk of contamination, and inform realistic protection efforts.
- People are exposed to pesticides in a range of jobs, from office work to flower shops to road repair, with farm workers and pesticide applicators arguably the most exposed groups. Pesticide use reporting can help document and prevent health problems associated with exposure in the workplace.
- Tracking pesticide use will create non-regulatory incentives for the adoption of pest management strategies that are better for the environment and farmers' bottom line.

California pesticide use data have been used in the following ways<sup>2</sup>:

- To track pesticide use trends, including by toxicity classification and use on particular crops
- For groundwater, surface water and air quality protection in specific locations
- For epidemiological studies, including studies which:
  - o identified locations where children are at highest risk of exposure to pesticides;
  - o looked at the association of organophosphate metabolites in urine, breast milk and blood of pregnant women with nearby and home pesticide use; and
  - o considered the association of foetal death and pesticide use.
- to track changing patterns of pesticide use in pest management
- to evaluate IPM strategies
- considered in the light of GIS-mapped information on habitat use by endangered species, in order to evaluate impact and make recommendations for use restrictions;
- to increase the public's access to right-to-know information

Of course it's important that any strategy to collect use data be carefully considered, or it may prove less than ideal in practice. For example, estimates of agricultural pesticide use that originate in surveys such as those done by the National Agricultural Statistics Service (NASS) in the US suffer from systematic inadequacies. Researchers investigating the accuracy of NASS estimates by comparing them with actual pesticide use as tracked by California's use reporting system, found that only 7 of 99 NASS estimates were within 10 percent of actual use, while 86 per cent were lower than reported use, many by more than a factor of two<sup>3</sup>:

California's Pesticide Use Reporting System, though not without its weaknesses, has been in place since 1990, and has been widely praised by many groups, including growers and representatives of the pesticide industry<sup>4</sup>. Zeneca Ag Products staff scientist James Markle wrote, *Due to increasing public concern with respect to chemical residues in food and the environment, there is a critical need* 

<sup>&</sup>lt;sup>2</sup> PAN (Pesticide Action Network) Germany. 2002. Pesticide Use Reporting: Legal Framework, Data Processing, and Utilisation. Part One: Full Reporting Systems in California and Oregon. <a href="http://www.pan-germany.org/download/pur-report1-ca-or.pdf">http://www.pan-germany.org/download/pur-report1-ca-or.pdf</a>

<sup>&</sup>lt;sup>3</sup> Pesticide Use in California: Strategies for Reducing Environmental Health Impacts. William S. Pease, James Liebman, Dan Landy, and David Albright. California Policy Seminar, Volume 8, Number 4, April 1996. Berkeley, CA. <a href="http://www.panna.org/resources/pestis/PESTIS.1996.69.html">http://www.panna.org/resources/pestis/PESTIS.1996.69.html</a>

<sup>&</sup>lt;sup>4</sup> See Hassanein, N. 2000. Keep on Tracking: Movement for Pesticide Use Reporting Advances. National Pesticide Right-To-Know Campaign, June 2000. <a href="http://www.pesticide.org/KeepOnTracking.pdf">http://www.pesticide.org/KeepOnTracking.pdf</a> pages 14-15.

for detailed and reliable pesticide use information for assessing risk and providing plans for risk mitigation. Industry uses data from the California Pesticide Use Report (PUR) as well as other reliable data sets for developing their risk assessments for the Environmental Protection Agency, the State, and other regulatory agencies. California Grape & Tree Fruit League President Richard Matoian also expressed his support for the database, saying that the desire among growers to provide 'real world' data to address erroneous assumptions about pesticide use clearly outweighed the fears and indignation growers had about revealing their identities, locations and pesticide use practices. Matoian also felt that the existence of the database had the additional benefits of increasing grower awareness.

Numerous additional comments which support the development of a pesticide use reporting system – from grower groups, agricultural policy analysts, government regulators, economists, health educators, medical associations, and the US National Research Council - have been gathered by the Wisconsin Strategic Pesticide Information Project on the three websites footnoted below<sup>5</sup>.

Previous PMRA communications have stated that OECD countries consider sales data a reasonable surrogate for use data. However, some OECD documents have commented on inadequacies of sales data as a proxy for use data<sup>6</sup>. Indeed, a EUROSTAT Task Force, including participation from the United States, has recognized and documented these limitations, and has published guidelines for the collection of use statistics in agriculture and horticulture (see Thomas, 2002, in footnote 6). A strategic review of agricultural and veterinary chemicals management in Australia identified a priority need to collect information on quantitative usage of chemicals by crop/species and region. The review recommended that a cost effective, comprehensive and integrated pesticide use reporting system be developed.<sup>7</sup> And, while collection of pesticide use data may be expensive, it's important to point out that, despite the expense, it has been in place in some jurisdictions for many years, and is considered money well spent.

In the Appendix, WWF has set out a model regulation for the collection of pesticide use information drawing on regulatory models from other jurisdictions.

**Recommendation #7:** The Regulations should be amended to include a requirement for collecting and reporting on pesticide use for the 2008 calendar year. This allows sufficient time to consult with provincial agencies and pesticide users and others and to phase in a system. The attachment provides a model regulation for collection of pesticide use, information drawing on regulatory models available in other jurisdictions.

<sup>6</sup> See for example, 'Guidelines for the Collection of Pesticide Usage Statistics within Agriculture and Horticulture, by Miles R. Thomas (2002), in which the author lists a number of disadvantages of using sales data <a href="http://www.oecd.org/dataoecd/32/39/2078031.pdf">http://www.oecd.org/dataoecd/32/39/2078031.pdf</a>> Also, the Report of the OECD Pesticide Aquatic Risk Indicators Expert Group (2000) contains a discussion of the reliability of use estimates based on sales data (p. 47-51), and notes: "In 23 of the 39 pesticide/crop/year combinations the estimated use values were within 10% of the original actual use values. However, some estimated values were considerably off: from 51% below to 24% higher than the original values." <a href="http://www.oecd.org/dataoecd/31/39/2078654.pdf">http://www.oecd.org/dataoecd/31/39/2078654.pdf</a>

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<sup>&</sup>lt;sup>5</sup> <a href="http://www.wsn.org/pesticides/pds">http://www.wsn.org/pesticides/pds</a> <a href="good sci.shtml">good sci.shtml</a> <a href="http://www.wsn.org/pesticides/pds">http://www.wsn.org/pesticides/pds</a> <a href="good sci.shtml">good sci.shtml</a> <a href="http://www.wsn.org/pesticides/userbenefits.shtml">http://www.wsn.org/pesticides/userbenefits.shtml</a>

<sup>&</sup>lt;sup>7</sup> OECD, 2004. National Progress in Reducing Pesticide Risks, Responses to Questionnaire for the 2004 Meeting of Environment Ministers. <a href="http://www.oecd.org/dataoecd/51/16/23959249.pdf">http://www.oecd.org/dataoecd/51/16/23959249.pdf</a>

#### Conclusion

This regulation serves an important public interest. For many years, we have had numerous inquiries from the public wanting to know the details of pesticide use in their communities, in both agricultural and urban settings. They also want to know where pesticide exposure is most likely to occur, what exposures are of greatest concern, and how they can avoid exposure. While this regulation may not answer all of these questions, it is an important first step, and could be improved as we are recommending in ways that will be better equipped to answer these questions.

Canadians place a very high value their health and the environment and we believe that they deserve better reporting systems so they can understand the impacts of pesticides on both. We trust these recommendations to amend the proposed Regulations will strengthen and clarify it so that it can better meet its stated purposes to update Canada's pesticide regulatory system, improve health and environmental reviews, and assist the Canadian public in perceiving the extent of pesticide usage in Canada more accurately.

We urge you to proceed expeditiously to improve and promulgate these Regulations, and to bring forward the other three Regulations required to bring the new Pest Control Products Act into force.

Sincerely,

World Wildlife Fund Canada

Canadian Environmental Law Association

Julia Langer

Director, International Conservation Program

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Counsel

Cc: Geraldine Graham, PMRA

CEN (Toxics, Biodiversity and Agriculture Caucuses)

Charles Caccia M.P. Chair, Standing Committee on Environment and Sustainable Development Johanne Gélinas, Commissioner of Environment and Sustainable Development

### **Appendix**

### Model regulation for maintenance and collection of pesticide use records

- 1. The following persons shall maintain records of pesticide use:
  - a. any person who uses a pesticide for an agriculture use
  - b. any person engaged for hire in the business of pest control
  - c. any person who uses a restricted pesticide
  - d. any person who uses a pesticide for industrial post-harvest commodity treatment; and
- 2. The records shall include the following information for each pest control operation
  - a. Date of application
  - b. Name of the operator of the property treated
  - c. Location of property treated
  - d. Crop commodity, or site treated;
  - e. Total acreage or units treated at the site; and
  - f. Pesticide, including the PMRA registration number which is on the pesticide label, and amount used.
- 3. In addition to the information required in subsection (2), the operator of the property which is producing an agricultural commodity, and an agricultural pest control business applying pesticides to such property, shall include in the records the following information for each pest control operation:
  - a. Location of the property treated, by county, section, township, range, base and meridian;
  - b. Hour the treatment was completed
  - c. The operator identification number issued to the operator of the property treated;
  - d. The site identification number issued to the operator of the property treated;
  - e. Total acreage (Planted) or units at the site; and
  - f. Name and identity of the person(s) who made and supervised the application, if the pesticide application was made by an agricultural pest control business.
- 4. The operator of the property which is producing an agricultural commodity shall maintain records of pesticides applied by an agricultural pest control business to such property, by site.
- 5. In addition to the information required in (2), persons engaged for hire in the business of pest control at a school site shall include in the records the following information for each pest control operation:
  - a. Time application was completed;
  - b. Name and address of the school site; and
  - c. Application location at the school site. For purposes of this subsection, location includes, but is not limited to, classrooms, playgrounds, cafeteria, vehicles, and athletic fields.
- 6. The records required pursuant to this section shall be retained for two years and made promptly available to the director or commissioner upon request.
- 7. The operator of the property which is producing an agricultural commodity shall report the use of pesticides applied to the crop, commodity, or site to the designated official in the county in which the pest control was performed. This report shall be hand-delivered or mailed, by the 10th day of the month following the month in which the work was performed. This report is not required if the pesticide use is reported to the designated official by an agricultural pest control business as specified in subsection (2), however, the operator of the property treated shall retain a copy of the business' report by site for two years.
- 8. An agricultural pest control business shall report the use of pesticides applied by it for the production of an agricultural commodity to the designated official in which the pest control was performed, by hand-delivery or by mail, within seven days of completion of the pesticide application. A copy of the

- report shall be sent by the business to the operator of the property where the pest control was done, within 30 days of completion of the pesticide application.
- 9. Each report of pesticide use pursuant to this section shall be on an acceptable form or in a format approved by the Pest Management Regulatory Agency. The information to be reported shall include the information specified in (2) <a href="http://www.calregs.com/cgi-bin/om\_isapi.dll?clientID=243182&infobase=ccr&jump=3%3a6624&softpage=Document42 JUMPDEST\_3:6624</a> and the name and address of the agricultural pest control business, which made the application, if such a business made the application.
- 10. If the report is mailed, the postmark shall be the date of delivery
- 11. Persons required to maintain pesticide use records pursuant to section (1) <a href="http://www.calregs.com/cgi-bin/om\_isapi.dll?clientID=243182&infobase=ccr&jump=3%3a6624&softpage=Document42-JUMPDEST\_3:6624</a>shall report a summary of the monthly use of pesticides to the designated official in the county in which the work was performed. The report shall be provided by the 10th day of the month following the month in which the work was performed. If the report is mailed, the postmark shall be the date of delivery.
- 12. The report shall be on a form as specified in section (9) <a href="http://www.calregs.com/cgi-bin/om\_isapi.dll?clientID=243182&infobase=ccr&jump=3%3a6627.1&softpage=Document42-JUMPDEST\_3:6627.1">http://www.calregs.com/cgi-bin/om\_isapi.dll?clientID=243182&infobase=ccr&jump=3%3a6627.1&softpage=Document42-JUMPDEST\_3:6627.1</a> or in a format approved by the Pest Management Regulatory Agency. The report shall include the following:
  - a. The name and address of the person who or business/organization which applied the pesticide(s);
  - b. County where the pest control was performed
  - c. Month and year of pesticide use
  - d. Crop, commodity or site treated, except when using a designated use code, as specified on the Monthly Summary Pesticide Use Report form;
  - e. Pesticide, including PMRA registration number which is on the pesticide label, and the amount used;
  - f. Number of applications made with each pesticide and the total number of applications made during the month; and
  - g. Total acres or units treated with each pesticide, except when using a designated use code, as specified on Summary Pesticide Use Report form.