

## PEST MANAGEMENT ADVISORY COUNCIL

## **MEETING REPORT**

March 27, 2001

Introduction / Review of Agenda - No changes to the agenda were made.

Ian Green, Deputy Minister of Health, who attended briefly at the beginning of the meeting, thanked the Council members for their work. Mr. Green said that he welcomed the opportunity to meet with the Council and believed that the diverse cross-section of stakeholders on the Council and the expertise of its Chair should result in very helpful advice for the department. Mr. Green recognized the past contributions of the Council, especially their advice on legislative reforms, and said that the government was poised to move quickly on this initiative. He also recognized the Council's important advice on sustainable pest management. Since joining the department, he has quickly become aware of the importance of the pesticide file with respect to safety and risk management issues and the importance of encouraging the registration of new and safer products.

Before continuing with the agenda, the Council had a brief discussion about the next meeting. The Council noted that, according to its terms of reference, it should meet twice each year and decided that the next meeting would be held in September or October, 2001.

# The Council decided that the chair should write to the Minister of Health, inviting him to attend the next meeting.

**Council Membership** - Dr. Van Loon, Council chair, reminded the members of the terms of reference which state that members will be appointed for terms of two years and that the Minister may reappoint sitting members. The original members of the Council were appointed by the Minister in the fall of 1998 and some resigning members have been replaced by new members for the balance of their two year terms. In order to retain some continuity, it was agreed that it would be desirable to re-appoint up to two-thirds of the original members.

Dr. Van Loon told the members that, following the meeting, all current members will be sent a letter from the Secretariat asking for an indication of whether or not they would accept reappointment. At the same time, a list of potential additional new members will be compiled. The Minister will determine the new membership. **Government Response to the Report of the Standing Committee on Environment and Sustainable Development** - John Smith, Head, Alternative Strategies Section, Alternative Strategies and Regulatory Affairs Division, PMRA, presented an overview of the Government Response to the Report of the House of Commons Standing Committee on the Environment and Sustainable Development (see Appendix C).

The following summarizes issues raised and points of view expressed by Council members during the discussion.

- Some members expressed support for the approach to risk reduction in the Government Response and believe that all stakeholders could find common ground in the Response. They are looking forward to the implementation of elements of the Response through legislation, regulations and policies, particularly those initiatives aimed at increasing the transparency of the regulatory system.
- Some members expressed the view that the Response should have recognized flaws in the current regulatory system and was weak in the area of health protection, for example, protecting children from risks posed by neurotoxins and endocrine disruptors, and that these areas would need to be addressed in legislation or regulations. [It was explained that the recently published Technical Paper, *Risk Assessment and Risk Management in the Pest Management Regulatory Agency* (SPN2000-01), delineates how these risks are addressed in current practices.]
- Some members expressed disappointment that the Response did not include a commitment to apply the precautionary principle and questioned the apparent priorities in the Response, for example, a higher priority seemed to be accorded to healthy lawns than to addressing children's risks. Other members believe the Response should have provided more support for organic agriculture.
- Some members suggested that additional resources are likely required to respond adequately to the Standing Committee Report. The Council decided to consider means to encourage the government to provide the necessary resources (see next agenda item, *Status of Current Issues: Legislation*).

The Chair noted that individual members were free to express their views on the Government Response to the chair of the Standing Committee as long as they did so as individuals and not on behalf of the Council.

#### **Status of Current Issues:**

*Legislation* - Geraldine Graham, a\Head, Regulatory Affairs Section, Alternative Strategies and Regulatory Affairs Division, PMRA, told the Council that the PMRA is in the process of seeking approval for final legislative proposals and direction from the Minister on timing of introduction into Parliament.

The Council decided that the chair should write to the Minister of Health on its behalf, strongly urging the Minister to introduce new pesticide legislation into Parliament as quickly as possible and to work with his Cabinet colleagues to provide adequate resources from Red Book allocations for the PMRA to implement the legislation and for the PMRA and other departments to implement other elements of the Government Response to the Report of the Standing Committee on Environment and Sustainable Development. Copies of the letter should be sent to the Minister of Finance and the chairs of the Standing Committees on Health, Environment and Sustainable Development, and Agriculture and Agri-Food.

The Council asked the Secretariat to draft the letter for revision by the chair and review by the members.

*Formulants Policy* - Diana Somers, a\Director, Health Evaluation Division, PMRA, presented key features of the Formulants Policy which is nearing completion (see Appendix D). The final policy will incorporate comments received on the draft released in May 2000.

Council members made the following comments:

- Sufficient lead time should be provided before implementation to reduce negative impacts on industry. [It was explained that the policy incorporated lead times and phase-in periods to address this concern.]
- The timelines for implementation in the May 2000 draft should be maintained. The impact of any delay should be assessed in terms of health protection, especially children's health.
- The cumulative risk of various formulants should be assessed. [It was explained that cumulative risk assessment methodology for pesticides with a common mechanism of toxicity would be implemented as it was being developed, starting with active ingredients and then moving to formulants in the future.]

*OECD Guideline on Developmental Neurotoxicity* - Diana Somers presented the status of work on an OECD Guidance Document for Neurotoxicity Testing and an OECD Test Guideline for Developmental Neurotoxicity Study (see Appendix E). Council members made the following comments:

- Testing for neurotoxicological effects is most applicable to the re-evaluation of older pesticides, since new products seldom display these properties. This is one of many reasons why the development of new pesticides should be encouraged.
- While the results of any available human epidemiological studies would be considered in risk assessments, the test guidelines are intended for use on animals, not humans.
- International harmonization in data requirements, test protocols and risk assessment methodology is critical in order not to jeopardize the competitive position of Canadian growers with respect to growers in other countries.
- There has been considerable delay in finalizing these documents. [The PMRA agreed to do what it could to advance this project.]

*Endocrine Disrupting Substances* - Diana Somers presented a status report on the development of a policy to augment the assessment of pesticides for effects on endocrine systems. The policy will identify data requirements to better characterize ability to disrupt endocrine organs (see Appendix F).

Council members made the following comments:

- Risk assessment methodology should recognize the special vulnerabilities of children at certain stages of development and should also address immunotoxicological effects.
- Interpretation of the significance of endocrine effects observed in studies could be difficult because the effectiveness of some new pesticides is dependant on their endocrine activity on the target plant or insect, for example, plant growth regulators.

Adverse Effects Reporting - Diana Somers presented an update on the development of a framework for reporting, evaluation and management of adverse effects (see Appendix G). Under the proposed new legislation, reporting of adverse effects by registrants would be mandatory.

The Council expressed support for the initiative and made the following comments:

• Reports of adverse effects should be available to the public. [It was explained that there will be surveillance reports for the public but this aspect of the project has not been fully developed.]

• Adverse effects reports should be validated before being included in any database, for example, to ensure that the adverse effect was related to the use of the pesticide and whether it was a result of misuse of the pesticide.

**Information for Poison Control Centres / ProdTox Network** - Guy Sanfaçon, Scientific Advisor, Quebec National Institute of Public Health, presented an overview of ProdTox, a powerful tool for Poison Control Centres and surveillance users (see Appendix H).

The subsequent discussion was led by Guy Sanfaçon and Diana Somers. The following summarizes major themes raised during the discussion.

- Physicians, especially those working in emergency rooms, need education in the identification of possible pesticide poisonings.
- While the project is a very impressive start, especially for handling acute effects, identification of effects due to chronic pesticide exposure will be very difficult.
- In the opinion of some Council members, only very serious adverse effects will be reported. For this reason, they would like the database to include reports from the general public as well. This would require careful consideration as to whether and how these reports could be validated and/or clearly separated from physicians' reports.
- It is recognized that access to various parts of the database will be controlled according to the type of user, for example, poison control centres, surveillance users, public. Consideration could be given to more extensive access for research scientists.
- Some members expressed the view that a separate database only for pesticides would be desirable and that individuals should be able to enter information in the database without the need for proof of cause and effect. [It was explained that, even though the database comprised information on all chemicals, there were specific reporting forms tailored to pesticides, to be completed by the physician after seeing the patient. It was also noted that the intention is to merge the information on health effects reported via ProdTox with that reported in the PMRA adverse effects database in order to compile a more comprehensive picture on adverse health effects from pesticides.]
- An analysis of health information in the database could lead to the PMRA re-evaluating and amending the conditions of registration of a pesticide. Industry needs to be given an early warning when adverse effects have been reported with respect to a particular pesticide so that, where possible, mitigation strategies can be developed. As well, the public should be warned so that they can avoid future adverse effects.

ProdTox is a Health Canada database and will be a secure, centralized site for confidential business information necessary for medical purposes. The database will also help industry in meeting their obligations to report adverse effects to the PMRA. Industry will also be expected to report adverse effects occurring in other countries with respect to products with the same active ingredient. In addition, the PMRA will have access to adverse effects information reported in the U.S. This will provide a larger body of information from which to identify trends.

### The Council expressed strong support for the ProdTox initiative and would encourage the Minister of Health to ensure that adequate resources are available for its development.

The PMRA would like to create a secure site in the ProdTox system for the confidential product specification forms provided to the Agency by pesticide registrants, so that physicians can have immediate access to this information when diagnosing a patient with poisoning symptoms. This will require permission from the registrants.

Action: The representatives of the Crop Protection Institute, Lorne Hepworth, and the Canadian Manufacturers of Chemical Specialties, Shannon Coombs, will discuss this issue with their industry colleagues and will make recommendations to the Council, through the Secretariat, regarding a mechanism for providing physicians with timely information on the ingredients of pesticide formulations.

**Minor Use Pesticides** - Daniel Chaput, Director, Compliance, Lab Services and Regional Operations Division, PMRA, presented an overview of PMRA programs for minor use pesticides (see Appendix I). In response to a question, it was noted that in recent years 30-50 User-Requested Minor Use Label Expansions (URMULE) have been granted per year, as well as a total of approximately 8 User-Requested Minor Use Registrations (URMUR).

The following summarizes issues raised and points of view expressed by Council members during the discussion.

- URMUR applications should not be limited to products registered in the U.S. or another OECD country in the last five years. [It was explained that this criterion is necessary to ensure that an acceptable foreign data review is available.]
- Sectoral departments should consider a program to encourage and fund the generation of data to support minor use applications along the lines of the IR-4 program in the U.S.
- The term "minor use" needs to be defined to prevent misuse of the minor use programs to circumvent normal data requirements. Emergency use registrations should not be used to circumvent generating the data needed to support a URMULE application.

- Minor uses of pesticides are critical to many integrated pest management (IPM) programs and thus to overall pesticide risk reduction.
- Innovative solutions are needed to address the minor use dilemma because, even if data requirements are tailored in light of anticipated small volumes and areas of use, the costs of data generation far outweigh potential sales. However, some members questioned the basis of this assertion, stating that the costs of data generation could be recovered over several years of sales.

Action Plan for Risk Reduction in Agriculture - John Smith presented the general objectives of a proposal to develop and implement a commodity-based risk reduction strategy (see Appendix J). The initiative is at an early stage of development and Council members were asked to provide their perspectives on how to achieve the objectives, including the role of stakeholders, and to advise on the selection of case studies. Bill Boddis, Agriculture and Agri-Food Canada (AAFC), joined the meeting for this discussion. The role of AAFC is to conduct and support research into IPM practices, support the development of newer, safer products particularly replacement products for older pesticides that may be determined to be unacceptable following re-evaluation, and the economic and competitiveness impacts of risk reduction.

There was general support for this initiative among Council members. The following summarizes major themes raised during the discussion.

- Some effort should be focused on the identification of priorities. Some members believe that older pesticides posing the highest risks should be targetted first. Other members pointed out that this could be done within specific commodities or regions. Some members support commodity-based priorities because this facilitates addressing the underlying source of the problem, i.e., the pests. Commodities could be prioritized on the basis of children's exposure. [It was explained that the re-evaluation program is prioritized by pesticide which could overlay a commodity basis for prioritizing this new risk reduction in agriculture initiative.]
- The success of this initiative is highly dependant on collaboration with federal and provincial agriculture departments in order to implement a systems approach to pest management, as opposed to pesticide management. A systems approach involves comparing alternate pest management methods using the same parameters to determine impacts on total risk reduction, for example, effects on soil dissipation, generation of waste, amount of pesticide use. Different models for agriculture, other than monoculture-based models that are inherently non-sustainable, also need to be considered.
- Some members believe that an ecosystem approach should also be integrated into the framework and that Environment Canada should be asked to advise on this aspect.

- A range of incentives for risk reduction needs to be considered, including tax relief and training.
- Limited provincial extension resources have sometimes prevented participation in national IPM programs in favour of programs aimed at encouraging the adoption of IPM practices at the provincial level. These local efforts could be viewed as being part of an overall risk reduction framework.
- Some effort should be focused on the development of indicators of success. For example, some members suggested that an indicator might be the adoption of best practices. Best practices will be adopted when they also have a positive impact on marketing. Other members believe the indicators should include a definition of risk reduction. Still other members pointed out that, even though different stakeholders might have different objectives, e.g., risk reduction, pesticide use reduction, profits, the same solutions are often beneficial from all perspectives, for example, alternative pest management strategies. For this reason, it might be better to embark on a pilot project without spending too much time on defining precise goals.
- The initiative will not succeed without the support of all stakeholders. The support and involvement of growers is critical. The most successful projects are those that start at the grass-roots, with support from provincial extension staff and private IPM practitioners. The role of the federal government should be to support these efforts through better regulation and encouragement of these grass-roots projects. Growers will adopt these systems because they will result in a better product and reduced labour and equipment costs. Better regulation includes making decisions in the context of a product's contribution to sustainable pest management, rather than only determining whether an individual product is safe and effective. Some members believe that the government should fund growers to adopt practices that reduce risks.
- Some members emphasized that health must be afforded a higher priority than economic interests.
- There was general agreement to begin with a number of case studies. Smaller commodities might be more suitable for case studies, but larger commodities have a bigger impact on risk.
- Canola growers are highly supportive of this initiative and would like to be considered for one of the first pilot projects. Some agronomic assessment studies have already been conducted with respect to the impact of IPM in canola and the impact of genetically-modified canola.
- The representative of the World Wildlife Fund also offered their projects on IPM for apples and potatoes as case studies.

The Council decided to establish a working group to work with the PMRA and AAFC in the development of the framework for risk reduction in agriculture and in the selection and implementation of case studies. John Smith, PMRA, will draft terms of reference for the working group for review by the Council. Members interested in serving on the working group should inform the Secretariat. Members may also nominate non-Council members to serve on the working group. The working group will report to the full Council.

**Healthy Lawns Strategy** - Wendy Sexsmith, Chief Registrar, PMRA, presented the key elements of the Healthy Lawns Strategy (see Appendix K). The strategy has been developed with the full participation of provincial governments through the Federal/Provincial/Territorial healthy lawns working group.

Despite strongly divergent views, the Council generally agreed that the Healthy Lawns Strategy should move forward. The following summarizes issues raised and points of view expressed by Council members during the discussion.

- Some members are disappointed that the Standing Committee recommendation to phase out the "cosmetic" use of pesticides is not being implemented and believe that elimination of the use of pesticides on lawns should at least be presented as one of the options in the Healthy Lawns Strategy, if not the best option. These members expressed the view that the use of any lawn pesticide represents an unnecessary and unacceptable risk to children.
- Some members question the apparent underlying assumption that all lawn pesticides pose unacceptable risks. Other members believe that a goal of risk reduction will be better supported by all stakeholders and will ultimately lead to substantial reductions in use. Some expressed the view that municipal bans could lead to civil disobedience and difficulties in controlling disease vectors.
- Some members believe that development of the Healthy Lawns Strategy was not sufficiently inclusive and recommend that future steps include stakeholder sessions across the country with no limitations on attendance.
- Some members expressed the view that risk management decision-making with respect to pesticides needs to be transparent. Municipalities cannot make informed decisions about urban use pesticides unless they know the basis upon which the pesticides were registered and whether risk assessments incorporated the most modern methodology, for example, consideration of cumulative risks.
- Baseline information on consumer attitudes and behaviour is needed. At the same time, consumers need to be given information about the risks of using or not using certain

pesticides, for example, lawn pesticides, swimming pool chemicals, so that they can make informed choices.

• Some members expressed the view that baseline information is also needed on risks posed by the status quo, i.e., use of currently registered pesticides in the urban setting, so that progress in achieving risk reduction can be measured. An ecosystem approach needs to be applied to risk assessment. Resources could be provided to municipalities who want to test alternative pest management strategies.

# Action: The Council requested that the PMRA report to the Council in one year on progress in implementing the Healthy Lawns Strategy and results achieved.

### **Appendices**

Appendix A -	Agenda for the meeting of March 27, 2001
Appendix B -	Participants at the meeting of March 27, 2001
Appendix C -	Presentation: Government Response to the Standing Committee on Environment and Sustainable Development's Report on Pesticides
Appendix D -	Presentation: Formulants Policy
Appendix E -	Presentation: OECD Guidance Document on Neurotoxicity Testing
Appendix F -	Presentation: Endocrine Disruptor Policy
Appendix G -	Presentation: Adverse Effects Reporting Project
Appendix H -	Presentation: PRODTOX, A Powerful Tool for Poison Control Centres and Surveillance Users
Appendix I -	Presentation: Minor Use Pesticides
Appendix J -	Presentation: Risk-reduction Strategy for Pest Management in Agriculture
Appendix K -	Presentation: Healthy Lawns