

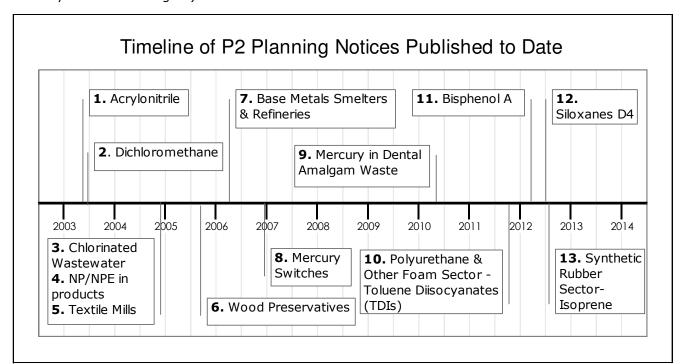
Pollution Prevention Planning Notices: Design Features

Pollution Prevention (P2) Planning Notices published in the *Canada Gazette* under Part 4 of the *Canadian Environmental Protection Act, 1999* (CEPA 1999) legally require persons subject to the Notice to prepare and implement a pollution prevention plan in respect of a specified substance(s).

This section provides a general summary of the main features related to the design of the P2 Planning Notices published to date and general information on how P2 Planning Notices have been used. However, it is important to understand that the specific design features may vary significantly from one Notice to another. For detailed information on the design features for each Notice, please refer to the individual P2 Planning Notices. The P2 Planning Notices can be accessed online from the P2 Planning section of Environment Canada's website at www.ec.gc.ca/planp2-p2plan.

Last Updated: April 2013

Since May 2003, 13 P2 Planning Notices have been published in the *Canada Gazette* under Part 4 of CEPA 1999 (see timeline below). P2 Planning Notices have been used as the primary risk management instrument or have been used in conjunction with other risk management instruments in order to fully manage a toxic substance(s). In fact, 2 of the P2 Planning Notices published to date were used as a follow-up to a voluntary agreement or standard that was already in place but did not meet the intended risk management objectives (i.e. Wood Preservatives; Mercury in Dental Amalgam).





A P2 Planning Notice can be designed to address one or more industry sectors or subsectors. For example, the P2 Notice for Dichloromethane targeted five industry sectors that ranged from aircraft paint stripping to the pharmaceutical sector, all of which had applications that involved the use of Dichloromethane. A wide range of industry sectors across Canada have been subject to the P2 Planning Notices. The following is a list of some of the different industry sectors that have been captured in P2 Planning Notices published to date:

- Chemical manufacturing
- Metal smelting and refining
- Municipal wastewater treatment
- · Wood preservation
- Dental facilities

Over 550 facilities in Canada that range from small and medium-sized enterprises (e.g. dental facilities and textile mills) to large enterprises (e.g. base metals smelters and refineries and zinc plants) have been subject to P2 Planning Notices.

Persons Subject

All P2 Planning Notices specify the person or class of persons subject to the Notice who will be required to prepare and implement a P2 plan. Three P2 Planning Notices published to date have identified those subject to the Notice by listing the names of specific facilities (i.e. P2 Notices for Wood Preservation Facilities, Base Metals Smelters and Refineries and Zinc Plants, and Mercury Switches in End-of-Life Vehicles), whereas the majority of Notices have described the persons subject as those involved in certain activities associated with a substance (e.g. manufacture, import, process, use). For most of these Notices, more than one activity has been used to identify persons subject to the Notice. In most cases, thresholds or quantities of the substances for the specified activities have also been used to delineate who is subject.

Figure 1 shows the activities that are used to identify persons subject to P2 Notices. The figure also provides a breakdown of the number of P2 Notices that specified a threshold for the substance-related activity as a trigger to further define who is subject to the P2 Notice.

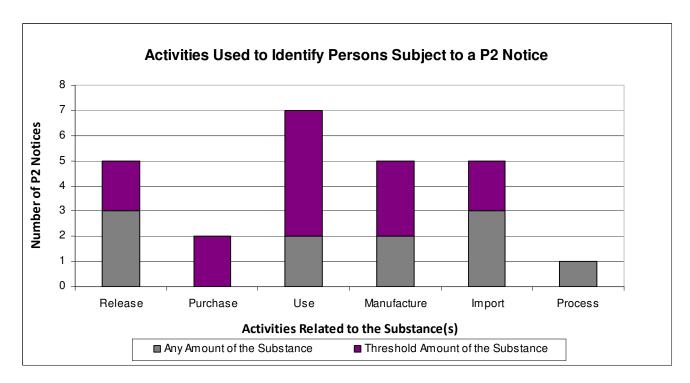


Figure 1: Number of P2 Notices that have identified a person or class of persons subject as those involved in certain activities related to the substance. In most cases, P2 Notices have specified a minimum threshold amount for these substance-related activities.

All P2 Notices published to date (13) have captured persons that are involved in specified activities on the date of publication of the Notice, and eight of the Notices have also captured persons that were involved in the activities prior to publication of the Notice. For example, the P2 Planning Notice for Mercury in Switches was published in 2007, but captures any person who, at any time since 1988, is or has been a manufacturer of vehicles that contain one or more mercury switches. This is to ensure the end-of-life management of mercury switches for all older vehicles that may still be on the road or eventually processed by steel mills. Additionally, all six of the P2 Notices published after 2006 contain a clause to capture any new or existing facilities that may become involved in the specified activities and meet the criteria for persons subject any time after the date of publication of the Notice.

Substances

All P2 Planning Notices specify the substance or group of substances for which a P2 plan must be prepared and implemented. To date, all substances addressed by P2 Planning Notices have been listed on Schedule 1 of CEPA 1999 (i.e. List of Toxic Substances, as defined under <u>section 64 of CEPA 1999</u>), and these P2 Notices were published under section 56 of CEPA 1999. A total of 23 CEPA toxic substances have been managed by P2 Planning Notices thus far.

In terms of the design of a P2 Planning Notice, the number of substances that are specified as well as how the substances are addressed may vary from Notice to Notice. A P2 Planning Notice can be designed to address one substance or multiple substances. Only 3 of the P2 Planning Notices published to date have addressed multiple substances; Textile Mills addressed 2 substances, Wood Preservatives addressed 5 substances, and Base Metal Smelters and Refineries and Zinc Plants addresses 11 substances, which is the largest number of substances that is being managed by one P2 Notice. Figure 2 below illustrates the percentage breakdown of P2 Planning Notices that have addressed one substance (77%) or multiple substances (23%).

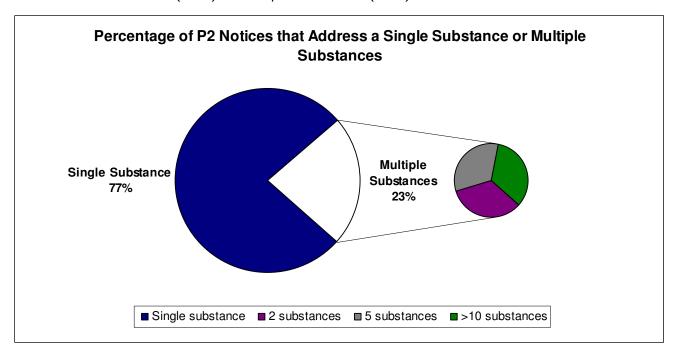


Figure 2: Percentage of P2 Planning Notices published to date that address either one substance or multiple substances. For the P2 Notices that address multiple substances, a smaller pie chart shows the proportion that address 2, 5 and more than 10 substances.

Activities to Be Included in the P2 Plan

All P2 Planning Notices specify the activities for which a P2 Plan must be prepared and implemented by persons subject to the P2 Notice. These may be commercial manufacturing, processing, use or other activities such as storage, handling and disposal that result in harmful releases of the substance(s). A P2 Notice may also contain exemptions for certain activities that do not pose a significant environmental or human health threat (e.g. research activities) or for activities already being regulated or managed by another risk management instrument.

Factors to Consider

The Factors to Consider stipulated in a P2 Planning Notice are the issues or activities that must be taken into account during the preparation of the P2 Plan by those who are subject to the Notice.

The Risk Management Objective (RMO), which refers to the desired environmental outcome or goal of the P2 Planning Notice, is always stated as one of the Factors to Consider. In terms of the type of RMO specified, 70% of the Notices specified a quantitative RMO such as a reduction target for the substance(s). The remaining 30% of the Notices did not specify a numeric RMO, but instead specified a qualitative RMO, such as reducing releases of the substance(s) to the greatest extent practicable using best available techniques economically achievable (e.g. P2 Notice for Polyurethane and Other Foam Sector-Toluene Diisocyanates). A qualitative RMO may be specified when there is limited data available and, as a result, could be useful in determining realistic reductions or release limits for future risk management.

P2 Planning Notices have been used to manage substances in various ways. The RMO for a P2 Planning Notice often provides an indication of which aspects of the substance(s) are to be managed. For example, the RMO may make reference to the management of the manufacture, use (e.g. in products), releases (to various media such as air or effluent) and/or transfers (e.g. end-of-life management through stewardship programs) of substances.

Examples of other Factors to Consider that have been specified in P2 Planning Notices published to date include: reference to existing codes of practice, guidelines or standards (62%); establishing other types of plans or programs in addition to the P2 Plan (77%) (e.g. leak detection and repair programs); record keeping (100%). All P2 Notices include monitoring of results (100%), and some Notices have required consideration of sampling, testing or modelling methods (see Figure 3).

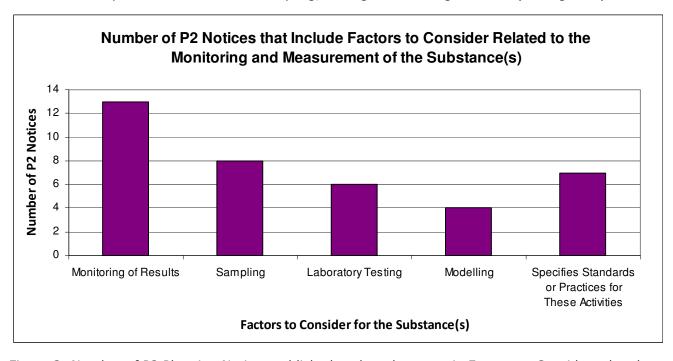
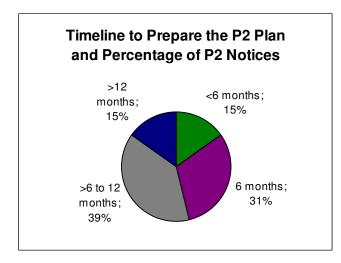


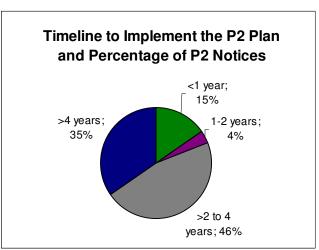
Figure 3: Number of P2 Planning Notices published to date that contain Factors to Consider related to the sampling, testing or modelling and monitoring of the substance(s), and those that specify standards or practices for such activities.

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Timelines

The timelines for preparing and implementing a P2 plan are another important element of all P2 Planning Notices. Each P2 Planning Notice specifies the timelines or periods within which the P2 Plan must be prepared and implemented. The length of time provided will depend on the nature of the P2 Planning Notice and they will vary from Notice to Notice. The shortest period to implement a P2 Plan that has been specified in a P2 Notice is just over 2 months (i.e. Wood Preservation), and the longest period to implement that has been specified in a P2 Notice is just over 9 years (i.e. Base Metal Smelters and Refineries and Zinc Plants). The majority of P2 Notices published to date specify a period of approximately 6 to 12 months to prepare the P2 Plan (39%), and 2 to 4 years to implement the P2 Plan (46%). Figures 4 and 5 below illustrate the breakdown for the periods to prepare and implement P2 Plans for the P2 Planning Notices published to date.





Figures 4 (left) and 5 (right): Range of timelines to prepare and implement the P2 plan and the percentage of P2 Notices that specified each timeline.

Reporting Requirements

Persons subject to P2 Planning Notices are not required to submit their plans to the Minister of the Environment. However, the Minister may request a copy of the plan. All persons subject to P2 Planning Notices are required to report to Environment Canada by submitting Declarations of Preparation, Declarations of Implementation and, for many Notices, Interim Progress Reports that contain information about their P2 Plan and related results. Information requested in Declarations and Interim Progress Reports (i.e. Schedules 1, 4, 5) generally includes: baseline data (i.e. on-site uses, releases, transfers of the substance(s)); actions in their P2 Plan, results and timelines (anticipated and actual); how the RMO will be/has been achieved; and how the Factors to Consider were taken into account in the preparation and implementation of the P2 Plan. The type of detailed information required for the substance(s) and related activities in the reporting schedules may vary significantly from one P2 Planning Notice to another, as illustrated in Figure 6.

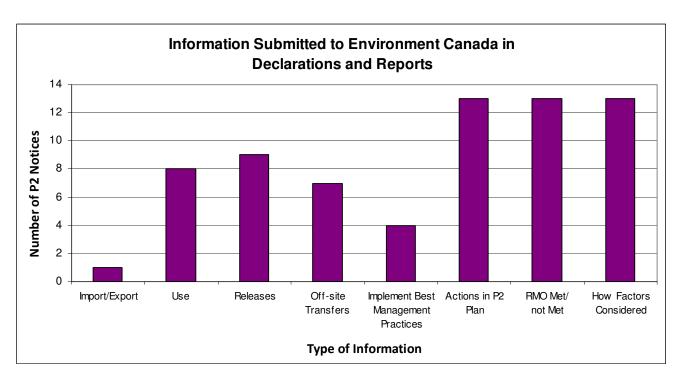


Figure 6: Type of information about the substance(s) and related activities that is submitted to Environment Canada in the required Declarations and Interim Progress Reports (i.e. Schedules 1, 4, 5) for the P2 Notices that have been published to date. Note: This is not a complete list of the types of information.

The Declarations and Interim Progress Reports submitted to Environment Canada are posted on the P2 Planning Section of Environment Canada's website and can be accessed through the publicly searchable P2 Planning Database (Note: personal and confidential information is removed prior to posting). The information filed to Environment Canada for each P2 Planning Notice is compiled and analyzed in order to measure the overall results and performance of the Notice in achieving its intended objectives. For more information on the performance results and published performance reports for the P2 Planning Notices published to date, see the P2 Planning Notices and Results page.