

Home > Consumer Product Safety > Reports & Publications > Pesticides & Pest Management > Evaluation of Pesticide Incident Reports 2010-3582, 2010-3825, 2010-3844, 2010-3895, 2010-3896, 2010-3953, 2010-3956, 2010-3979, 2010-3980, 2010-4037, 2010-4649, 2010-4789, 2010-5712, and 2010-6013

Consumer Product Safety

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Background

Pest control products are registered by Health Canada's Pest Management Regulatory Agency (PMRA) for use only if there is reasonable certainty that no harm to human health or the environment will result from exposure to, or use of, the product as directed on the label. The PMRA collects incident reporting data under the authority of the Pest Control Products Act. If a pesticide manufacturer receives information about an incident involving one of their products, they are required by law to submit that information to the PMRA. It is important to note that the information presented in incident reports reflects the observations and opinion of the person reporting it, and does not include any assessment by Health Canada, nor does it confirm an association between the pesticide and the effects reported.

Health Canada considers the reported information to determine if there are potential health or environmental risks associated with a pesticide and, if necessary, takes corrective action. Such action could range from minor label changes to discontinuation of the product.

Incident Report

A fire occurred at a chemical distribution warehouse in Kelowna, British Columbia, on July 13, 2010. A large amount of water used to douse the fire entered nearby Mill Creek via the storm drains. Subsequently, a large number of dead fish was observed in the creek.

Several pest control products were being stored at the warehouse at the time of the fire. Analysis of water samples collected from the creek and from the fire douse water (run-off exiting the storm water system before it entered the creek) revealed the presence of several pesticide active ingredients and other chemicals. As such, several reports regarding the same incident were submitted to the PMRA from different pesticide registrants.

In accordance with the *Incident Reporting Regulations* classification system, this incident was classified as Environment Major. These incident reports are posted on the PMRA electronic [Public Registry](#) on the Health Canada website.

Health Canada Evaluation

The PMRA reviewed the information contained in the incident reports, as well as water monitoring data provided by the British Columbia Ministry of the Environment, Environment Canada and the PMRA Regional Office. Based on the results of the water monitoring, as well as the environmental fate and toxicity of the active ingredients detected, the PMRA conducted a causality assessment.

Based on concentrations of the pesticide active ingredients chlorpyrifos, diazinon, malathion, trifluralin and permethrin detected in the douse water and Mill Creek and the corresponding environmental fate and toxicity values, the PMRA concluded that it is **possible** that the fish mortality was the result of the above-mentioned pesticides entering Mill Creek in the fire douse water.

For the remaining active ingredients detected in Mill Creek, the PMRA concluded that it is **unlikely** that the other pesticides caused the mortality based on concentrations found in the water samples and corresponding toxicity values. However, the PMRA cannot rule out that

these pesticides may have added to the overall toxicity of the chemical mixture that entered Mill Creek.

Health Canada Conclusion

Based on all the information received and gathered by the PMRA, it cannot be concluded that one particular active ingredient is solely responsible for the fish mortality. Nor can it be ruled out that other components in the fire douse water contributed to the fish kill. The PMRA has evaluated this incident and concluded that no regulatory action is required; however, the information will remain in the database and will be routinely re-examined in conjunction with any new data that is received. It is important to note that a pest control product is only registered for use if there is reasonable certainty that no harm will result from exposure when the product is used as directed on the label. In this particular incident, release of these products into the environment was as a result of an accident, whose unusual and unfortunate circumstances are extremely unlikely to be repeated, and this has been taken into account in the review of this incident.

More information about the [Pesticide Incident Reporting Program](#) is available on Health Canada's website. Should you require further information please contact the [Pesticide Incident Reporting Program](#).

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