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Case Study Series—Demonstrating Value of Program Evaluation

Evaluation Helps Pesticide Program Finish Project Four Years Sooner Than Estimated

- > Federal law requires comprehensive review of all pesticide active ingredients registered before Nov. 1984.
- > Re-registration is the last step in a process before new safety labels are applied to pesticide products.
- > A 2007 process evaluation found the program behind schedule but identified opportunities to improve.
- > Efficiency nearly doubled after the program implemented several evaluation recommendations.
- > Product re-registrations are estimated to finish in 2014, four years sooner than an earlier estimate.
- > Increase in efficiency means new labels are applied to products sooner, resulting in safer pesticide use.

A jump in efficiency will likely result in the U.S. Environmental Protection Agency (EPA) completing its pesticide product re-registration process in 2014, four years sooner than previously estimated. This was due in part to the Office of Pesticide Programs' (OPP) implementation of recommendations from process evaluations, conducted in FY2006 and FY2007, which identified opportunities for innovation and streamlining.

The Federal Insecticide, Fungicide, and Rodenticide Act requires the EPA to review all pesticide active ingredients registered before November 1, 1984 to ensure that they meet current health and safety standards and labeling requirements. Pesticides that meet those standards may be declared "eligible" for re-registration, which is known as a Re-registration Eligibility Decision (RED). Once a RED is issued for a pesticide, every product that contains that active ingredient must undergo the product re-registration process before new safety labels are applied.

Process evaluation identifies bottlenecks, opportunities for efficiency improvements

Though the re-registration process began in the late 1980s, by 2005 the OPP faced a looming backlog of products awaiting re-registration decisions. Re-registration decisions include products re-registered, products cancelled by the pesticide producer, products amended because they have more than one active ingredient, and products suspended because the producer did not pay the proper fees.

In the Fall of 2005 the program underwent a process evaluation. The evaluation, performed by an independent firm, interviewed key stakeholders and analyzed program data to identify where the delays were occurring in the re-registration process. Those interviews sparked a dialogue among OPP staff, who began to develop pilot projects designed to speed up the process. Evaluators found that the evaluation process itself motivated staff to innovate because it demonstrated that management was serious about fixing the delays in product re-registration.

The evaluation found that it took an average of 54 months to re-register a product, and that the majority of products that had gone through the process up to that point (4,695 out of 7,358) had been voluntarily cancelled by the pesticide producer. The study estimated that at its current pace, re-registration decisions on all products would be complete at the end of 2018, which was six years longer than EPA's original prediction, and five years longer than the period for which EPA had budgeted.

The study outlined 21 recommendations to streamline the re-registration process, some of which were to continue the pilot projects developed by OPP staff. Some example recommendations include:

- Pursue electronic labels to streamline the label review process
- > Establish hand-off meetings when tasks transfer from one division to another
- Incorporate product re-registration into performance standards
- Use SWAT teams and other strategies to reduce backlogs

Implemented recommendations lead to jump in product re-registrations

The OPP adopted 17 of the 21 recommendations, and in less than a year the number of product reregistration decisions jumped dramatically, from 506 in FY2006 to 979 in FY2007 (Figure 1). Efficiency improved further in FY2008, resulting in 1,197 re-registration decisions. The OPP now predicts that it will complete all re-registration decisions (about 22,000 in total) by 2014—four years sooner than the evaluation's estimate based on the previous pace of decisions.

This allows the OPP to transfer its employees to other important tasks sooner than estimated. The OPP is now required to reevaluate all registered



pesticides every 15 years, with the first 15-year review beginning in 2007. Its goal is to have all resources devoted to this registration review by 2014 (Table 1). Had the OPP finished its product re-registrations in 2018, it would have had tremendous difficulty in meeting the future registration review schedule.

Table 1. Employee	Transition Pla	n from Re-registrati	on to Registration	Review
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⁽FTE = Full-Time Equivalent)

Program Area	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Non-food use REDs (re-registration)	150	50						
Post-RED Follow-up (re-registration)	158	100	32					
Product Re-registration (re-registration)	30	30	30	30	30	20	10	
Registration Review	41	199	317	349	349	359	369	379
Total	379	379	379	379	379	379	379	379

Increased efficiency means safer use of pesticides in the field

A major benefit of the faster re-registration process is that new labels are being applied to pesticide products at a quicker pace. These labels contain new health and safety information that instructs those applying the products in the field on how to minimize the risk of harm to humans and the environment. This is expected to result in safer application of the pesticide products.

This case study demonstrates how process evaluation can help a program meet or exceed scheduled deadlines. The evaluation identified opportunities for streamlining the product re-registration process. The end result is a much more efficient program that saved valuable time and disseminated important health and safety information more rapidly.



Sources: Evaluation of the U.S. EPA Pesticide Product Reregistration Process: Opportunities for Efficiency and Innovation, prepared by Abt Associates Inc., March 2007.

The Value of Process Evaluation: Risk Reduction Measures for Pesticide Products Could Be Implemented Sooner, presented by Debra Kemp, Abt Associates, Inc. and Peter Caulkins, EPA OPP, June 2009 at the Environmental Evaluators Networking Forum.

http://www.nfwf.org/Content/ContentFolders/NationalFishandWildlifeFoundation/Evaluation/EEN/Documents/ 2009Forum/2.5_KEMP-CAULKINS-ppt.pdf

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