

# Understanding the DCPA Pesticide Management Plan

av 2008



Jessica Atlakson May 2008

## What is the DCPA Pesticide Management Plan?

The DCPA PMP is a management approach that will help prevent DCPA contamination of the ground water in an area south of Homedale, Idaho and throughout the state in general. It outlines several actions to prevent or minimize further presence of DCPA in the ground water. The DCPA PMP was incorporated by reference into IDAPA 02.03.01 Rules Governing Pesticide Management Plans for Ground Water Protection. This means that the DCPA PMP is enforceable by Idaho Law, and any person who fails to comply with the DCPA PMP will be subject to penalties listed under Section 22-3423, Idaho Code. On July 1, 2008 the DCPA Pesticide Management Plan (PMP) will take effect.

#### What is DCPA?

DCPA, or dimethyl tetrachloroterephthalate, is a preemergent herbicide used to control annual grasses and broadleaf weeds. DCPA is commonly known by the trade name "Dacthal." DCPA is a general use product used on turf, ornamentals, strawberries, certain vegetables, onions, beans, and cotton. Two products are currently registered in Idaho that have DCPA as an active ingredient: Dacthal<sup>®</sup> Flowable Herbicide and Dacthal<sup>®</sup> W-75 Herbicide.

### Why was the DCPA PMP created?

The DCPA PMP was created to respond to elevated detections of DCPA south of Homedale. From 2001 to 2006, the Idaho State Department of Agriculture (ISDA) sampled 1,307 domestic wells across the state of Idaho for various pesticides, including DCPA. DCPA was detected in varying concentrations in 165 wells, or 12.6% of the wells tested. Most of these DCPA detections were low in concentration. However, several wells located south of Homedale had elevated concentrations of DCPA in the ground water, including one well that had DCPA concentrations that exceeded the EPA health standard of 70 micrograms per liter.

#### How does the DCPA PMP affect me?

The DCPA PMP puts restrictions on DCPA use within a 4 square mile area south of Homedale where the elevated concentrations of DCPA were found. The grey box in Figure 1 is the DCPA area of restriction, where all users of DCPA must follow all restrictions listed in the DCPA PMP. The DCPA area of restriction is bounded by Pioneer Road to the north, Homestead

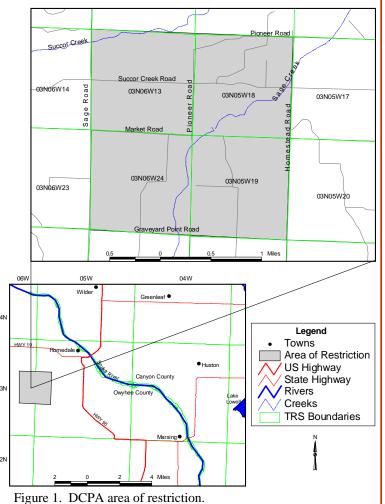
Road to the east, Graveyard Point Road to the south, and Sage Road to the west. If you use any products containing the active ingredient DCPA within the DCPA area of restriction you **must** follow the DCPA PMP.

#### What are the DCPA restrictions?

If you apply DCPA within the DCPA area of restriction you **must** attend an educational training, follow the restrictions listed in the DCPA PMP, and comply with additional record keeping requirements.

# **Educational Training**

If you are going to apply DCPA within the DCPA area of restriction, you **must** have completed the ISDA approved DCPA training no earlier than two years prior to the DCPA application date. The training will be a minimum of two hours and cover topics such as DCPA application restrictions within the DCPA area of restriction, characteristics of DCPA, and hydrogeology of the DCPA area of restriction.



#### **DCPA** Restrictions

If you apply DCPA within the DCPA area of restriction, you **must**:

- 1. Follow a DCPA Rotation. DCPA may not be used on the same field within four years of a previous DCPA application.
- 2. Use the lowest application rate on the DCPA label according to the appropriate soil type. For example, Table 1 is the application rate from the Dacthal® Flowable Herbicide label. If you are applying this product within the DCPA area of restriction, and the soil type at your application site is medium-silt loam with 0 to 3 percent organic matter, you must apply the product at 8 pints per acre. If you are applying this product within the DCPA area of restriction, and the soil type at your application site is light-sand or sandy loam with 0 to 3 percent organic matter, you must apply the product at 6 pints per acre.

Table 1. Application rate for Dacthal® Flowable Herbicide.

2.	Develop an Irrigation Water Management plan for
	your field. If more water is applied than is used by
	the crop, water will move below the root zone,
	which can leach DCPA below the root zone where
	it becomes both an economic loss and a potential
	pollutant of ground water. Careful planning and
	management of irrigation can improve DCPA
	efficacy and reduce the potential for ground water
	contamination.

- 3. Reduce the amount of soil erosion. DCPA can be transported off site by soil erosion, which could lead to leaching of DCPA into the ground water. There are several options to reduce soil erosion from fields including planting a crop cover at the end of the fields or using PAM in furrow irrigation fields.
- 4. Total pesticide use can be reduced by applying relatively narrow bands of chemical, rather than broadcasting over the entire field. Instead of applying DCPA to the entire row, apply DCPA in a band near to the plant. This application method should be used in fields that are irrigated with sprinklers.

Soil Type	Organic Matter %	Broadcast Rate of DACTHAL FLOWABLE/A
Light-sand or sandy loam	0-3	6-8 pints
Medium-silt loam	0-3	8-10 pints
Heavy-clay loam	0-3	10-14 pints
Heavy-silt loam	3-5	12-14 pints

# Recordkeeping Requirements

If you use DCPA within the DCPA area of restriction you **must** maintain records of the application for three years. The records must be maintained in accordance with Title 22, Chapter 34, Idaho Code, and IDAPA 02.03.03.150.02, "Rules Governing Pesticide and Chemigation Use and Application". The records must be ready to be inspected, duplicated, or submitted when requested by ISDA.

# Is there any other information included in the DCPA PMP?

There are a number of voluntary Best Management Practices (BMPs) that ISDA encourages all pesticide applicators, inside and outside of the DCPA area of restriction, to voluntarily adopt. These are not required, however, these voluntary BMPs can help prevent DCPA contamination of ground water. ISDA encourages the following voluntary BMPs when using DCPA:

1. Follow the Idaho NRCS Conservation Practice Standard, Pest Management Code 595. A copy of the 595 Standard can be found at http://efotg.nrcs.usda.gov/references/public/ID/595.pdf.

5. Incorporate Integrated Pest Management (IPM) into your operation. Extension IPM programs at the University of Idaho (U of I) were established in the early 1970's. The U of I Extension program is currently developing an IPM for onions. Contact the Idaho Pest Management Center at 364-4046 for more information.

### Where can I get a copy of the DCPA PMP?

You can download a copy of the DCPA PMP from ISDA's website at: http://www.agri.idaho.gov/Categories/Environment/water/waterPDF/gwreports/DCPA-PMP.pdf or you can request a copy by calling 208-332-8607.

For more information, please contact: Idaho State Department of Agriculture Water Program 2270 Old Penitentiary Boise, ID 83712 Phone: 208-332-8500

Website: http://www.agri.idaho.gov