



# DIELDRIN

## Shaw Air Force Base, S.C.

Dieldrin, found on and beneath one Shaw land parcel, is a pesticide that in its pure form is a white powder with a mild chemical odor.

From the 1950s until 1970, dieldrin was widely used on crops like corn and cotton. Because of concerns about damage to the environment and potentially to human health, the Environmental Protection Agency banned all uses of dieldrin in 1974, except to control termites. Then, in 1987, the EPA banned all uses.

Here, dieldrin was discovered in soil and groundwater in 1995 at site OT-16A, a motor pool area. The Air Force bought the land in 1954. Previous owners had used it to grow cotton. The Air Force believes that the dieldrin on the property was from a farmers' use of the pesticide on cotton crops before the Air Force assumed ownership. Nonetheless, the Air Force is cleaning up the site.

In January 2002, the Air Force removed 161 tons of dieldrin-contaminated soil, properly disposed of the soil and backfilled the site with 390 tons of clean soil. Later tests show that the dieldrin plume in the shallow Lang Syne Aquifer is not moving and there are no exposure pathways to humans through soil or water. Since then, the Air Force has conducted long-term groundwater monitoring and instituted informational land use controls at the site. Regular groundwater monitoring will continue until 2025.

### WHAT ARE REGULATORY STANDARDS FOR DIELDRIN?

There are no federal drinking water standards for dieldrin.

### HOW MIGHT I BE EXPOSED TO DIELDRIN?

Dieldrin is everywhere in the environment, but at very low levels. Some ways you can be exposed to dieldrin are:

- Eating food like fish or shellfish from lakes or streams contaminated with it, or contaminated root crops, dairy products, or meats.
- Living in homes that were once treated with dieldrin to control termites.

Here, many precautions have been taken to ensure there are no known completed exposure pathways for dieldrin in groundwater to reach human beings.

### HOW CAN DIELDRIN AFFECT MY HEALTH?

People who have intentionally or accidentally ingested large amounts of full-strength dieldrin have suffered convulsions and some died. Some workers exposed to moderate amounts in the air for a long time had headaches, dizziness, irritability, vomiting, and uncontrolled muscle movements. Workers removed from the source of exposure rapidly recovered from most of these effects. There is no conclusive evidence that dieldrin causes cancer in people.

There are laboratory tests that can measure dieldrin levels in blood, urine and body tissues to see if you have been exposed. These tests are not routinely available at most doctor's offices, however, because they require special equipment.

Shaw has taken aggressive, comprehensive and deliberate steps to install treatment systems on the dieldrin groundwater plume and enact land use controls to reduce or eliminate exposure risk to dieldrin by people living and working on and around the base.



*Dieldrin contamination on some Shaw land can be traced back to its use as a pesticide on cotton fields before the Air Force purchased the property in 1954. The Air Force, as part of its commitment to being a good neighbor to the people of Sumter, S.C., has assumed responsibility for cleaning the dieldrin from soil and groundwater at the site.*

#### POINTS OF CONTACT

##### Mr. Rob Sexton

Chief, Community Relations  
20<sup>th</sup> Fighter Wing Office of Public Affairs  
345 Cullen Street  
Shaw AFB, SC 29152  
803-895-2019 / robert.sexton@shaw.af.mil

##### Ms. Rachel Poole

Bureau of Land and Waste Management  
South Carolina Department of Health & Environmental Control  
2600 Bull Street  
Columbia, SC 29201  
803-896-4073 / poolerd@dhec.sc.gov

#### FOR MORE INFORMATION

U.S. Environmental Protection Agency:  
[www.epa.gov](http://www.epa.gov)  
South Carolina Department of Health & Environmental Control  
[www.scdhec.gov](http://www.scdhec.gov)

