

Cornell University
State University of New York
U.S. Department of Agriculture

Center for Environmental Research 468 Hollister Hall Ithaca, NY 14853

The Water Resources Research Institute for the State of New York Under P.L. 95-467 Telephone: (607) 256 7535

March 31, 1980

MEMO

TO: 201 Technical Advisory Committee

FROM: Keith S. Porter

RE: Implementation with respect to Aldicarb

There is considerable public anxiety in eastern Suffolk County regarding the extent and seriousness of contamination of drinking water supplies by pesticides. This memo proposes that material be developed through the 208 program to better inform the community affected.

Problem to be addressed

During the past few weeks, agencies concerned with the problem of pesticide contamination in eastern Suffolk have been faced with heavy demands for information from the public and farming communities. The questions asked usually correspond to four broad categories:

- -- How serious is the problem?
- -- How did it occur?
- -- Who is doing what to solve the problem?
- -- What are the alternatives?

Background to the problem

The Long Island 208 program identified the likelihood that groundwater contamination from soluble pesticides such as Aldicarb could occur, in 1976. In accordance with the recommendations of the Long Island 208 plan, Cornell staff sought to sample groundwater to confirm or refute the existence of contamination. As a result of this implementation, Union Carbide, the manufacturing company, provisionally determined that there were traces of Aldicarb in groundwater in 1978. After further investigation, the company informed EPA of the contamination in the summer of 1979.

Since that time, a very great deal of work has been done. This work includes:

- The Suffolk County Department of Health Services has undertaken exceedingly extensive and intensive surveys of drinking water supplies.
- 2. A health survey of eastern Suffolk County has been completed.
- 3. The toxicology of Aldicarb and its Acceptable Daily Intake has been thoroughly reviewed by the N.Y.S. Department of Health, USEPA, and an USEPA Scientific Advisory Panel.
- 4. Cornell University, Intera, a consulting company, and USGS are under contract to USEPA to construct mathematical models that will provide a means of predicting the migration of Aldicarb in the unsaturated and saturated soil on a local and regional scale.
- 5. Domestic methods of water treatment are being assessed by Union Carbide, Cornell University, and the Suffolk County Department Of Health Services.

Proposed further work as part of 208 implementation

It is proposed that informational material be prepared in two steps.

First, a pamphlet be prepared that, on an interim basis, gives a brief description of the problem, how it is being dealt with and what results are expected.

Second, to prepare and publish a more complete account in about six to eight weeks time. By that time, the Suffolk County Department of Health will have completed its current sampling survey which will give a "snapshot" of the extent of the present contamination. Also by that time the current modelling work by Intera and Cornell University will be complete. This will relate the observed levels to the previous use of Aldicarb and provide a means of determining whether the contamination of the groundwater is likely to lessen or increase. (From field work so far completed, it may be concluded that substantial quantities of Aldicarb may not yet have reached the zone of saturation.)

It is also proposed that the descriptive material deal with the Aldicarb problem as being illustrative of more general problems of groundwater contamination by synthetic organic chemicals.

Expected results of the proposed work

The primary result will be that complete information will be accessible

to the public and the farming communities. It is also expected that public understanding will be promoted of: how contamination of drinking water supplies by organic chemicals may occur, what remedial measures are feasible, and which are the instrumental government agencies.

Proposed budget

Personnel/labor				•						•		•	\$1,200
Printing materials and supplies				•	•	•	•	•	•				720
Travel	•	•	•	•	•	•	•	•	•	•	•	•	40
	TOTAL												\$1,960