

FOR SARAH Miller

MEMORANDUM

TO: Clean Water Activists

FROM: Rick Spencer, Clean Water Campaign Coordinator

DATE: 3/14/94

SUBJECT: Chlorine-Dioxin Campaign Strategy

On April 5th, the National Wildlife Federation will be conducting a conference call to kick off a national campaign to include a chlorine - dioxin provision in the clean water act. The immediate goal is for Congress to mandate and provide funding for the EPA to develop a national strategy to reduce or phase out the class of chlorine - dioxin chemicals that have created the growing public health crisis concerning reproductive deformities, breast cancer, and impaired learning disabilities.

The EPA proposal provides a first step to eliminate the use of bioaccumulative pollutants for the following reasons:

- Chlorine based compounds are the largest source of dioxin and other estrogenic copycats.
- sufficient science exists to justify the reduction and in some cases the elimination of many chlorinated compounds.
- there are thousands of products in use today that have a chlorine base. We need to develop a strategy to minimize economic disruption -- especially to vulnerable workers who have few little alternatives for employment; and
- the chlorine-dioxin strategy is precedent setting because the EPA is willing to look at a whole class of chemicals, rather than just regulating individual chemicals in isolation.

Fortunately, we have a couple of months to build a public campaign. We expect S. 1114, to reach the Senate floor in late May or June. Key to our success, is our ability to educate and mobilize public opinion demand that the Senate authorize a begin to phase out the worst of these "hormone copycats." With industry already on the hill and misinforming the public your help in reaching media and public in your state is the critical component for this amendment to happen.

To aid in your efforts, several Federation staff members are currently preparing an organizers kit that includes the following items:

report "Hormone Copycats"
 assorted factsheets
 talking points

To: Camilla Kenner

From: Rick Spencer

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letter to the editor
New York State Woman's group letter

On April 5th, we will use this packet as a starting point to discuss a strategy to build a broad coalition with other segments of society, such as woman', veteran's, Native American and other subsistence anglers that are most affected by dioxin and other estrogen copycat chemicals.

There is no question that these chemicals weaken the ability of humans to reproduce and develop healthy children. The examples of mammals and sick animals that you have seen or read about are a precursor for what is in store for the human race. This is a battle that must be won.

The call will take place on April 5, 1994 at 3:30 pm EST.
(2:30 CST, 1:30 MST, 12:30 PST)

To participate:

- 1) RSVP to Rick Spencer at 202-797-6635 by noon on April 5th
- 2) Dial 1-800-888-1826 (or 202-296-3132 in the Washington D.C. dialing area) a few minutes before the call is scheduled to begin. Give your name and ask to be connected to the Wildlife Federation conference call.

We are looking forward to talk with you on April 5th.

Thanks for your interest and commitment.

To: Camilla Kenner

From: Rick Spencer

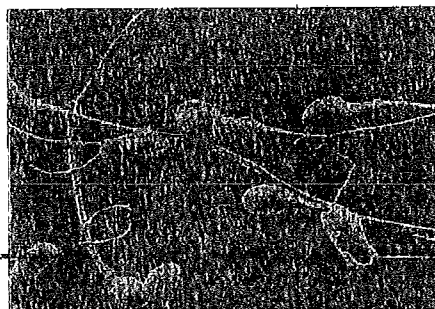
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The federal wetlands protection program has come under attack and danger of being weakened. And millions of pound of toxic chemicals continue to be discharged in to the nation's waterways. In addition, causing cancer, evidence is mounting that Dioxin, and other similar chemicals are responsible for a variety of reproductive deformities, learning brain disorders, and weak immune systems. Offspring of parents consume certain these chemicals have a greater risk of being born with weak immune systems, deformed reproductive organs, learning disabilities and other developmental illnesses.

causes infertility. Perhaps the oddest thing about endometriosis is that there were only 21 reported cases in the world 70 years ago; today there are 5 million in the United States alone. In a new German study, women with endometriosis were more likely than others to have high levels of PCBs in their blood. Some breast cancer may also have an environmental cause. Unusual amounts of DDE, the pesticide residue that seems to be leaving the alligators shortchanged, shows up in the tissue of women with breast cancer, according to a study last year by Mary Wolff of New York's Mount Sinai School of Medicine. Women with the greatest number of these DDE footprints were four times more likely to get breast cancer than women with the fewest such signs. The connection is plausible. This year the National Cancer Institute will begin a major study of the high rates of

genlike pesticides, have their own reproductive problems: more infertile females, sterile males, lower sperm counts and high estrogen levels. One male, says toxicologist Charles Facemire of the U.S. Fish and Wildlife Service, "had estrogen levels higher than most females."

Despite such findings, "much of the evidence [about estrogen mimics] is circumstantial," says Thomas Goldsworthy of the Chemical Industry Institute of Toxicology. Although there is no question that the pollutants fit the body's estrogen receptors, there's still some wiggle room to argue that the chemicals do not switch on the same biological pathways that real estrogen

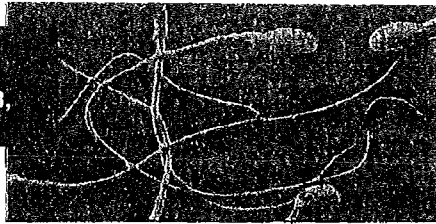


And Now the Good News

NOT ALL ESTROGENS OR ESTROGEN mimics are bad. Some aid development and increase the number of babies. Just as there is good cholesterol and bad cholesterol, there is good estrogen and bad estrogen. Four of the hormones that are by only a few molecules, says Dr. David A. Soto, a senior scientist at the Department of Health and Human Services, puts it. All estrogen is not equal. Her theory is that when the body manufactures estrogen, the hormone can be broken down by either of two biochemical pathways. One leads to a form called 16-hydroxyestrogen, which can damage DNA and so is the form suspected of sparking breast and testicular cancers. The other leads to a form called 2-hydroxyestrogen that does no harm and may even do good.

SHOOTING BLANKS

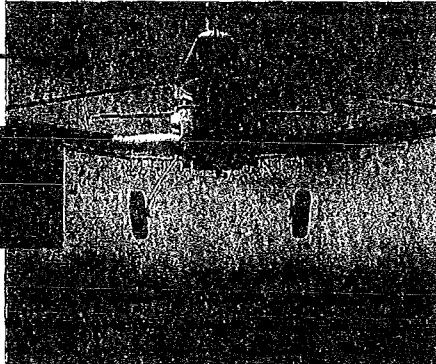
Men's sperm counts are down 50 percent since 1938, says one study.



DAVID M. PHILLIPS—PHOTO RESEARCHERS

CROP DUSTER

Among the chemicals that mimic estrogen are widely used pesticides.



ROBERTO VALLADARES—IMAGE BANK

breast cancer on New York's Long Island, assessing women's exposure to estrogen-like compounds in pesticides once used on the potato fields (and still in the aquifers) where suburbs now sprout.

Playing canary in the coal mine, wildlife "was the first to send signals that something was seriously wrong," says zoologist Theo Colborn of the World Wildlife Fund. Fish in places like the Great Lakes, where PCB and DDT concentrations are extremely high, and the terns and gulls that eat them, are becoming biochemical hermaphrodites: the males have reproductive parts of both sexes. Florida panthers, eating high on a food chain contaminated with estrogen-

does. Skeptics also ask why, if the ubiquitous estrogen impostors really trigger cancers and other diseases, rates of the illnesses are not higher. Lawmakers may not wait for an answer. In February, the Clinton administration called for an 18-month study of chlorine (a component in many estrogenlike chemicals) to assess its effects on human health and the environment, with an eye toward restricting or banning it. A bill in Congress would phase out chlorine in the paper and pulp industries over five years. Hell has no fury like a congressman who discovers he's not the man he thought he was.

SHARON BEGLEY with DANIEL GLICK

Many edible plant products, such as French beans, soybeans and pomegranates, contain "phytoestrogens" that might combat cancer, suggests Kenneth Setchell of the Children's Hospital Medical Center in Washington. In his lab, rodents that are fed soy protein develop fewer tumors than those on a soy-free diet. This might help explain why women in Japan have low rates of breast cancer when they eat tofu, soy sauce and miso—all rich sources of good estrogen—but have "American" rates when they move to the United States and adopt a Western diet. Compounds in such "healthy" foods as broccoli, says Davis, might nudge estrogen down the path to the cancer-fighting form.

Last fall Victor Henderson of the University of Southern California reported a tantalizing link between estrogen and a lower risk of Alzheimer's disease. In a group of 2,400 postmenopausal women, those who took estrogen pills (for such problems as osteoporosis and hot flashes) were 40 percent less likely to develop this crippling dementia than those who did not take estrogen. In rats, estrogen helps make a "growth factor" that maintains and strengthens connections between neurons. It also helps produce an enzyme that speeds communications among neurons. The effect seems to be particularly strong in memory centers, the first to be ravaged by Alzheimer's.

Annunziata (Newsweek)