

SOUTHWEST & TEXAS Waterworks Journal

Published by Southwest Section and Texas Section,
American Water Works Association of

306 E. Adams

817/773-1313

Temple, Texas 76501

August, 1981

Vol. 63, No. 5

Asbestos-Cancer Study Finds No Link

U.S. Environmental Protection Agency (EPA) Region 6, headquartered in Dallas, Texas, has issued a statement that no conclusive evidence links the ingestion of asbestos in drinking water to gastrointestinal cancer.

In an official response to questions regarding the potential health effects of asbestos in drinking water Mac A. Weaver, Acting Chief of the Water Supply Branch, reported:

"Based on our findings, we do not believe the citizens . . . are subject to any measurable health risk from asbestos in their drinking water.

"Because of the acknowledged health problems related to asbestos inhaled and/or ingested by workers in occupational exposure, it is natural for people to extend this concern to other exposures. EPA and the scientific community have felt that extensive study is justified to determine if there is a level at which asbestos in drinking water might represent a measurable risk to public health. No conclusive scientific evidence has yet linked gastrointestinal cancer incidence with ingestion of asbestos through drinking water."

Weaver added that the presence of asbestos fibers in drinking water may result from naturally-occurring sources in the ground water or from asbestos-cement (A/C) pipe when highly corrosive waters are conveyed.

August, 1981

Public Works
August 1981

City, County and State

**EPA Region Six Comments on
Safety of Asbestos-Cement**

U.S. Environmental Protection Agency (EPA) Region Six, headquartered in Dallas, Texas, has stated that no conclusive evidence links the ingestion of asbestos in drinking water to gastrointestinal cancer. In an official response to questions regarding the potential health effects of asbestos in drinking water Mac A. Weaver, acting chief of the Water Supply Branch reported "Based on our findings, we do not believe the citizens... are subject to any measurable health risk from asbestos in their drinking water. Because of the acknowledged health problems related to asbestos inhaled and/or ingested by workers in occupational exposure, it is natural for people to extend this concern to other exposures. EPA and the scientific community have felt that extensive study is justified to determine if there is a level at which asbestos in drinking

PUBLIC WORKS for August, 1981

water might represent a measurable risk to public health. No conclusive scientific evidence has yet linked gastrointestinal cancer incidence with ingestion of asbestos through drinking water." Weaver added that the presence of asbestos fibers in drinking water may result from naturally-occurring sources in the ground water or from asbestos-cement pipe when highly corrosive waters are conveyed.

GROUND WATER AGE
ELMHURST, ILL.
MONTHLY :15,400

JUN 1981

B. J. R.

ASBESTOS PIPE FIRMS CHALLENGE EPA ON CRITERIA

A TRADE association representing manufacturers of asbestos cement pipe have challenged EPA's water quality criteria and argues that they should not be used as guidelines in promulgating drinking water standards.

The A/C Pipe Producers Association claims that EPA's criteria rely on inadequate scientific evidence. They note that EPA's conclusions are based on research on the inhalation of asbestos, despite the fact that extensive scientific findings are available on the ingestion of asbestos, including through the medium of drinking water.

In stating its case, the association cited studies conducted in both Quebec and the Puget Sound area,
CONTINUED ON PAGE 60

ASBESTOS PIPE FIRMS CHALLENGE EPA

CONTINUED FROM PAGE 11

...the waters are high in naturally occurring asbestos. Both studies failed to show any link between the mineral and gastrointestinal cancer.

The pipe producers also pointed to studies reaching the same conclusion based on tests in Connecticut, Duluth, Minneapolis and St. Paul.

A/C Pipe Noncarcinogenic Says Study

Arlington, VA - Preliminary results of government-sponsored studies on the effect of ingested asbestos on laboratory animals show no carcinogenic effect.

The studies are being conducted by the National Institute of Environmental Health Sciences (NIEHS) under the direction of the Public Health Service's National Toxicology Program. The Environmental Protection Agency (EPA) has contributed a portion of the funding.

The aim of the NIEHS/EPA studies is to assess the biological (carcinogenic) effects of asbestos fibers which are ingested, or taken into the body through the digestive tract, as in drinking water.

A large number of male and female hamsters were fed as-

bestos over their entire lifespan. Two types of asbestos fibers commonly used in the manufacture of asbestos-cement products were administered. The doses of asbestos fed to the hamsters were

millions of times higher than levels which occur in drinking water consumed by the public in a lifetime, in areas where asbestos occurs in the drinking water. The same number of animals called a "control group," were fed a diet with no asbestos.

NIEHS reports, "There was no indication of major difference in the mortality rate between the hamsters receiving the asbestos diet or the control diet." Preliminary analysis of the hamster data indicates that no carcinogenic or cocarcinogenic effect was observed.

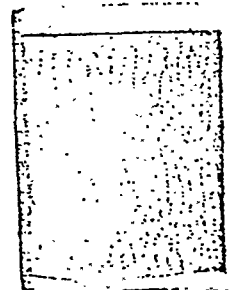
The analysis included thorough pathologic evaluation of some thirty tissues from test animals.

In addition, preliminary results of rat studies, carried out in a similar manner, also were reported. The lifetime exposure phase of the study concluded, "...longevity was not affected by exposure to the various types of fibers."

These findings are consistent with a number of other studies of animals fed asbestos in food or drinking water. In 1980, the Health Research Institute at Fairleigh-Dickinson University reported no malignant tumor related to treatment in hamsters maintained on drinking water containing 13 billion asbestos fibers per liter.

322-146 THE FLORIDA OFFICIAL
RECORD

JUN 1981



* * *

ASBESTOS WATER CRITERIA BASED ON INADEQUATE DATA, A/CPPA CHARGES

Drinking water standards should not be based on Environmental Protection Agency water quality criteria for asbestos, according to the Asbestos/Cement Pipe Producers Association and the Asbestos Information Association/North America. Criteria, published in late 1980, "do not accurately reflect either the latest or the best scientific knowledge" about effect of asbestos in drinking water, A/CPPA says (CWR, Dec. 2, 1981, p. 243).

EPA drew conclusions almost exclusively from inhalation studies, despite the fact that a substantial amount of ingestion research was available, A/CPPA charged. Omitted from EPA data were findings of studies which failed to establish any cause and effect relationship between ingested asbestos and gastrointestinal cancer. Studies conducted in Quebec, Connecticut, Minnesota and Washington failed to show causal link between asbestos fibers in drinking water and gastrointestinal cancer. Studies conducted at EPA's Health Effects Research Laboratory show similar results.

Although water quality criteria are not binding, A/CPPA claims they fall far short of meeting statutory requirements. Charging that EPA ignored available evidence and calculated "totally inadequate" risk assessments, A/CPPA maintains that criteria should be rewritten to reflect studies on ingestion. Since EPA issued no modifications to recommended ambient water concentrations for asbestos, A/CPPA is reviewing challenges to EPA action.

500-S CLEAN WATER REPORT
RECEIVED

MAY 19 1981

