PLAINTIFF'S EXHIBIT WRG-532

# ZONOLITE
## CONSTRUCTION PRODUCTS DIVISION

TO All Southern Region Sales Personnel

DATE May 26, 1970

FROM C. R. Lowe

SUBJECT New York City Air Pollution

cc Tom Egan
Nelson Beveridge
Bruce Williams

Gentlemen:

Attached is a copy of todays Wall Street Journal Editorial outlining the danger of big city pollution problems in New York City.

You will note a reference to the health hazard of asbestos fibers in this article.

This is a problem that will be spreading throughout the nation because of the intent desire of health authorities to clean up air pollution. Each of you should read this article and be aware of our competition's problem. You, of course, should be discriminate in the direct reference of any of these asbestos problems, however, they do exist and national authorities are discussing them daily, therefore, this is additional ammunition for the promotion of our monokote cementitious fireproofing product.

Sincerely,

C. R. L.

CRL/ds

THE WALL STREET JOURNAL

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★★ Eastern Edition TUESDAY, MAY 26, 1970

# *Danger in the Air*

## New York Atmosphere Points Up the Hazards Of Big-City Pollution

### Auto Exhausts, Incinerators, Electric Plants Pour Out Soot, Dust, Poison Gases

### Early Warnings of Disaster

By Nicholas Gage
*Staff Reporter of* The Wall Street Journal

NEW YORK—In Central Park, on a knoll just behind the Metropolitan Museum of Art, stands an unintended monument to the effects of air pollution.

The monument is a 224-ton granite obelisk known as Cleopatra's Needle, carved in 1500 B.C. and presented to the city in 1882 by the Khedive of Egypt. The obelisk's makers cut hieroglyphic characters into all four of its sides, and the ancient writing was still plainly visible when it was brought here.

Today, however, there are markings only on two sides. Those on the south and west sides, which face prevailing winds and concentrations of air pollution, have been entirely obliterated. "Several inches of granite have been literally eaten off the obelisk by the chemicals in the air," says an official of the city parks department. "Ninety years in New York have done more damage to it than 3,500 years in Egypt."

Obviously, if New York's polluted air can eat away rock, it can hurt people. Doctors know it contributes to respiratory ailments, and they suspect it may cause cancer and even brain damage. [illegible]

What's particularly frightening about all this is that New York's air is not much different from the air of many other U.S. cities—just somewhat dirtier because the city is bigger. Even traditional pure-air havens like Arizona, Colorado and Vermont increasingly are finding their air fouled with the same corrosive pollutants that, in sufficient volume, can damage monuments and threaten human health.

But because of the concentration of population and pollution here, New York City provides a model of sorts for those seeking to identify pollutants, trace their sources and sort out their effects.

The most obvious pollutants—though generally among the least dangerous to health—are tiny particles of dust from the streets and soot from incinerators, residential furnaces and industrial smokestacks. Scientists say most of these particles are too large to work their way into lung tissues, so they are more an aesthetic nuisance than a health menace.

There are a number of smaller particles, however, that are less visible but more menacing to health. They include asbestos fibers, which have been linked to chronic lung disease and cancer, and lead, which may cause brain damage in children and injure the nervous systems of adults.

**A Higher Death Rate**

Lead comes chiefly from auto exhaust. Asbestos is released constantly into the air from disintegration of automobile brake linings and from the construction of the city's massive buildings, where asbestos is sprayed on as a sheathing for steel girders. Dr. Cuyler Hammond, a former director of the American Cancer Society, has found that smokers working where they are also exposed to asbestos dust have a rate of lung cancer eight times that of the general population.

Altogether, the U.S. Public Health Service says, New Yorkers were bombarded last year by 70,000 tons of "particulate matter."

At the same time, however, the city's air was invaded by 400,000 tons of sulphur dioxide and 1.6 million tons of carbon monoxide—gaseous compounds that in Manhattan regularly exceed the levels scientists consider harmful to health.

Sulphur [illegible] comes from the combustion of fossil fue[illegible]d oil) for energy and heating. Last ye[illegible] Yorkers burned 2.5 billion

**Caused Chemical Changes**

Beyond such effects as causing nylon fabrics to disintegrate mysteriously, these compounds can be breathed deep into the lungs, injuring sensitive tissues. Prolonged exposure to even low levels of sulphur dioxide has been linked to heart attacks, mutations and cancer.

"We know that sulphur dioxide causes certain chemical changes," says Robert Shapiro, associate professor of chemistry at New York University. "If these same changes occur in human sperm cells, they could lead to mutations that would pose great threats to future generations. And if these changes occur in other cells, such as in the lungs, then sulphur dioxide might even be a cause of cancer."

In Manhattan sulphur dioxide in the air is often as high as .12 parts per million (ppm)—three times the .04 ppm mark established by the Federal Government as an acceptable level. In the city as a whole sulphur dioxide concentrations average .06 ppm.

The main pollutant in New York—as in most other areas—is carbon monoxide, chiefly from motor vehicles. Carbon monoxide is dangerous because it hampers the delivery of oxygen to the body's tissues. "At high concentrations it kills quickly," says the Public Health Service. "At lower concentrations it brings on headaches and a slowing of physical and mental activity."

As might be expected, carbon monoxide is most harmful to people who are exposed to high levels of it for long periods. And many people in New York breathe high concentrations of carbon monoxide over the entire day. New York state guidelines warn that levels should not exceed 15 ppm more than 15% of the time during an eight-hour period. But after four months of measurements in midtown Manhattan it was determined that carbon monoxide levels remained above that level all day every day.

During daytime hours when traffic is heaviest, the carbon monoxide level in Manhattan often soars to between 25 and 30 ppm, having an impact on the lungs equivalent to that of two packs of cigarettes a day. In some areas of the city, such as the Lincoln Tunnel and the approaches to the George Washington Bridge, the

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