

COMMERCIAL APPEAL

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Expert Says Park Route Pollution Won't Top Federal Safety Limits

By MICHAEL LOLLAR

A Massachusetts air pollution expert said in federal court yesterday exhaust pollution from the proposed Overton Park expressway would not exceed federal safety limits even under the "worst possible" conditions.

Dr. Donald Dean Adrian, a professor of engineering at the University of Massachusetts, testified for the Tennessee Highway Department that he has calculated pollution levels for the park freeway using the worst traffic and weather conditions possible.

The "worst conditions" he said, would be when the wind is blowing either to the north or to the south at only one mile an hour during the peak traffic periods.

Dr. Adrian was graduated from Stanford University with a PhD in civil engineering in 1964, after which he taught sanitary engineering at Vanderbilt University in Nashville.

He listed several reasons for his conclusions, ranging from enforcement of new pollution control laws to assumptions based on the "biology of pollution."

Under direct examination by J. Alan Hanover, special counsel for the state Highway Department, he said federal air pollution control acts passed in 1968 require automobile manu-

facturers to install pollution control devices on all new cars by 1972.

Eventually, he said, the pollution control devices should reduce exhaust pollution by 20 per cent. "As older cars are discarded, the level of emissions per vehicle will decrease."

He said the expressway, which allows faster speeds than on existing streets, will reduce pollution in itself. "In general, cars moving at high rates of speed emit less carbon monoxide than slow moving vehicles, and vehicles moving at a constant rate of speed emit less carbon monoxide than those under stop-and-go driving conditions."

Dr. Adrian also attacked the possible use of a tunnel to house the interstate inside the park.

The plaintiffs have proposed the possible use of a 2,400-foot cut and cover tunnel ventilated with four exhaust fans built 10 feet above ground level.

"What you would be doing in a situation like that," Dr. Adrian said, "would be concentrating the pollutants in the area of each exhaust tower. In each case, the pollution would be exhausted at one point rather than say over a 600-foot area."

"The wind would pick up a much bigger load of pollutants,

and carry them downwind giving the pollutants less chance to mix with air as they moved through and outside the park.

John W. Vardaman, attorney for the Citizens to Preserve Overton Park and other plaintiffs, asked him, however, if it would not be possible to use filtering devices inside each exhaust tower.

Dr. Adrian said an "activated charcoal filter" (like in some filter cigarettes) would remove some pollutants, particularly solid material. "And, some other type of filter might be used to help carry out the combustion process (burn the wastes)."

But, he said, "I'm somewhat dubious about how such devices would perform when they are actually in use."

He told United States Dist. Judge Bailey Brown he has never actually heard of anyone using such tunnel filters.

Later, Peter Schuyler, director of the water division of the Memphis Light, Gas & Water Division, testified briefly for the state Highway Department. He argued it would not be feasible to build Interstate 40 along the L&N Railroad right-of-way north of the park.

Mr. Schuyler said 10 LG&W water wells are located along the railroad tracks and that water from those wells is pumped into the Parkway pumping station at North Parkway and Dunlap.

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