

*Urban Ozone and the Clean Air Act:
Problems and Proposals for Change*

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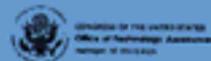
**URBAN OZONE AND THE CLEAN AIR ACT:
Problems and Proposals for Change**

Staff Paper

Prepared by:

**Oceans and Environment Program
Office of Technology Assessment
United States Congress**

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A Staff Paper
from OTA's Assessment of
New *Clean Air Act* Issues

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PREFACE

Over the past several months, Congress has once again turned its attention to the widespread failure of U.S. cities to attain the health-based air quality standard for ozone. The last major set of changes to the Clean Air Act, the Clean Air Act Amendments of 1977, set December 1987 as the latest deadline for attaining the standard. Last December, as many urban areas faced the prospect of sanctions, Congress extended the deadline through August, allowing more time to consider several proposals addressing the ozone nonattainment problem. This OTA staff paper has been prepared to assist the ongoing Congressional consideration of these proposals.

S. 1894, a comprehensive set of amendments to the Clean Air Act, has been reported by the Senate Committee on Environment and Public Works and awaits consideration by the full Senate. H.R. 3054, introduced by Congressman Waxman and 39 cosponsors, is currently being discussed within the Subcommittee on Health and the Environment of the House Committee on Energy and Commerce. EPA has proposed its "post- 1987" ozone policy in the Federal Register, stating its plans for implementing the existing Act's mandate to attain the ozone standard in case the August deadline passes without further Congressional guidance.

This OTA staff paper was written in response to separate requests by the Senate Committee on Environment and Public Works and 34 Senators, asking for more information about S. 1894 and EPA's proposed post- 1987 ozone policy. The staff paper is part of a larger, ongoing OTA assessment of the ozone nonattainment issue, requested by the Senate Committee on Environment and Public Works and the House Committee on Energy and Commerce.

The staff paper contains five chapters:

1. Summary findings and conclusions.
2. The effects of ozone, including discussions of the *health effects* of ozone, current *exposure* to ozone concentrations above the standard, and the effects of ozone on *crops and trees*.
3. Ways to control ozone, including analyses of the *effects of emissions reductions on ozone concentrations*, the *sources of the pollutants that lead to ozone formation*, the *likelihood of attaining the standard with reductions possible from existing control techniques*, and the *costs of controls*.
4. A history of efforts to control ozone since the Clean Air Act Amendments of 1970, focusing on the last major reauthorization in 1977, and *why efforts since 1977 failed to bring more areas into attainment* with the ozone standard.
5. A comparison of the three leading proposals addressing the ozone nonattainment problem.