



Project Summary

Technical Assistance in Support of Permitting Activities for the Thermal Destruction of PCBs

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The report describes phased efforts to identify, evaluate, and provide technical permitting assistance to utility boiler owners considering thermally destroying PCB-contaminated mineral oil. Identification initially concentrated on identifying ideal PCB destruction sites using size, age, location, and fuel use criteria to evaluate available boilers. This effort then extended to directly contacting USEPA Regional Offices to identify utility boiler owners who had expressed an interest in the PCB disposal program. Regular bi-monthly contacts were initiated with the Regional Offices and the status of all regional PCB activities was tracked. This contact produced three potential PCB burn sites operated by: (1) Consolidated Edison of New York, (2) Northeast Utilities, and (3) Pennsylvania Power and Light. Test plans were received from the first two and were reviewed and found acceptable: these facilities, however, subsequently withdrew their involvement with the PCB destruction verification burn program due to local community opposition. The Pennsylvania Power and Light Company site remains under active consideration. By the end of the technical performance period of this work assignment, a candidate site had not been identified or approved for testing. Appendices to this report detail the utility boiler site selection methodol-

ogy, the status of PCB activities in EPA Regional Offices as of May 1, 1981, and the test plan evaluations for the Consolidated Edison and Northeast Utilities facilities.

The project also required that State and Local Governments be provided information needed to aid permitting of a PCB verification burn. Under this phase of the project a PCB "white paper" was prepared which summarized background technical information used in writing the PCB regulation (40 CFR 761). A second paper was prepared summarizing comments delivered at a public meeting entitled "What Should We Be Doing About PCBs?" Both of these papers are provided as appendices to the report.

This Project Summary was developed by EPA's Industrial Environmental Research Laboratory, Research Triangle Park, NC, to announce key findings of the research project that is fully documented in a separate report of the same title (see Project Report ordering information at back).

Introduction

In promulgating final rules for the disposal of polychlorinated biphenyls (PCBs), the USEPA recognized that high efficiency industrial and utility boilers could provide an environmentally safe alternative for destroying dielectric fluids contaminated with from 50 to 500

ppm of PCBs. To provide technical background for these rules, the EPA is sponsoring a series of comprehensive sampling programs at selected industrial and utility sites. This report describes phased efforts made to identify, evaluate, and test a utility boiler when used to thermally destroy PCB-contaminated mineral oil. Included as part of this overall effort was the preparation of two background documents on PCBs. These documents summarized pertinent Federal regulatory actions in this area and presented a broad perspective of viewpoints on what should be done about PCB disposal.

Results

Attempts to locate an acceptable utility boiler for a PCB verification burn in the first phase of this contract initially concentrated on identifying ideal sites by the size, age, location, and fuel of the boilers. This effort then extended to directly contacting EPA Regional Offices to identify utility boiler owner's who had either expressed interest in the PCB program or given EPA a formal 30-day pre-burn notification. A regular bimonthly contact was initiated with Regional EPA Offices and the status of all Regional PCB activities was tracked. This contact coincided with a growing interest by many utilities throughout the country in utilizing their boilers for disposing of PCB-contaminated dielectric fluid generated within their own distribution networks. This contact also produced, in sequence, three potential verification burn sites: The Ravenswood Plant of Consolidated Edison Company of New York, Middletown (Connecticut) Station of Northeast Utilities, and Montour Station of Pennsylvania Power and Light Company (PP&L). A test plan was received and reviewed from Consolidated Edison and Northeast Utilities. The PP&L unit remains under active consideration. The test plan reviews covered PCB regulations for a boiler burning PCBs (40 CFR 761) and also covered a standard operating plan for the burn period and the existence of a spill prevention and control program. Since the data obtained during a verification burn would be widely disseminated, it was felt that all aspects of the burn should be completely documented. Both sites reviewed had acceptable test plans, but each eventually withdrew its application to burn PCBs after substantial community opposition, while the second site continued to seek regulatory

approval but did not want the publicity attendant with a verification burn, again due to community pressures. The third site is proceeding slowly with its application. It is holding regular meetings with local citizens groups in an attempt to satisfy their concerns before an official application is made.

The second phase of this contract required that state and local governments be provided information needed to aid permitting of a burn. Under this effort a PCB "white paper" was prepared which summarized background technical information utilized in writing PCB Regulations (40 CFR 761). A second paper was prepared on comments delivered at a public meeting entitled "What Should We Be Doing About PCBs?" This forum brought together speakers from the industrial, public health, regulatory, academic, utility, and local government sectors to discuss the various viewpoints of PCB disposal in utility boilers. This program could serve as a model for similar meetings dealing with hazardous waste disposal.

Appendices to the project report include a list of potential verification burn sites, comments on two utility boiler test plan submittals, an updated status of regional EPA PCB activity, a PCB "white paper," and a summary of comments presented at the public meeting previously mentioned.

Technical assistance continues to be provided to EPA Regional Offices, states, and industry to aid the permitting process through subsequent contract efforts.

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The complete report, entitled "Technical Assistance in Support of Permitting Activities for the Thermal Destruction of PCBs," (Order No. PB 82-231 325;

Cost: \$10.50; subject to change) will be available only from:

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