

Technology Profiles
Eleventh Edition

Volume 1
Demonstration Program

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NOTICE

The development of this document was funded by the U.S. Environmental Protection Agency (EPA) under Contract No. 68-C-00-185, Task Order 13, to Computer Sciences Corporation. The document was subjected to the Agency's administrative and peer review and was approved for publication as an EPA document. Mention of trade names or commercial products does not constitute endorsement or recommendation for use at any particular hazardous waste site.

FOREWORD

The U.S. Environmental Protection Agency is charged by Congress with protecting the Nation's land, air, and water resources. Under a mandate of national environmental laws, the Agency strives to formulate and implement actions leading to a compatible balance between human activities and the ability of natural systems to support and nurture life. To meet this mandate, EPA's research program is providing data and technical support for solving environmental problems today and building a science knowledge base necessary to manage our ecological resources wisely, understand how pollutants affect our health, and prevent or reduce environmental risks in the future.

The National Risk Management Research Laboratory is the Agency's center for investigation of technological and management approaches for preventing and reducing risks from pollution that threatens human health and the environment. The focus of the Laboratory's research program is on methods and their cost-effectiveness for prevention and control of pollution to air, land, water, and subsurface resources; protection of water quality in public water systems; remediation of contaminated sites, sediments and ground water; prevention and control of indoor air pollution; and restoration of ecosystems. NRMRL, collaborates with both public and private sector partners to foster technologies that reduce the cost of compliance and to anticipate emerging problems. NRMRL's research provides solutions to environmental problems by developing and promoting technologies that protect and improve the environment; advancing scientific and engineering information to support regulatory and policy decisions, and providing the technical support and information transfer to ensure implementation of environmental regulations and strategies at the national, state, and community levels.

This publication has been produced as part of the Laboratory's strategic long-term research plan. It is published and made available by the EPA's Office of Research and Development to assist the user community and to link researchers with their clients.

Hugh W. McKinnon, Director
National Risk Management Research Laboratory

ABSTRACT

The Superfund Innovative Technology Evaluation (SITE) Program, now in its sixteenth year is an integral part of EPA's research into alternative cleanup methods for hazardous waste sites around the nation. The SITE Program was created to encourage the development and routine use of innovative treatment and monitoring and measurement technologies. Under the program, EPA enters into cooperative agreements with technology developers. These developers research and refine their innovative technologies at bench- or pilot-scale and then, with EPA's support, demonstrate them at hazardous waste sites. As a result, the SITE Program provides environmental decision-makers with data on new, viable treatment technologies that may have performance or cost advantages compared to traditional treatment technologies.

This document is intended as a reference guide for those interested in technologies participating in the SITE Demonstration, Emerging Technology, and Measurement and Monitoring Programs. The two-page profiles are organized into two sections for each program, completed and ongoing projects, and are presented in alphabetical order by developer name. Reference tables for SITE Program participants precede the sections and contain EPA and developer contacts. Inquiries about a SITE technology evaluation or the SITE Program should be directed to the specific EPA project manager; inquiries on the technology process should be directed to the specific technology developer.

Each technology profile contains (1) a technology developer and process name, (2) a technology description, including a schematic diagram or photograph of the process, (3) a discussion of waste applicability, (4) a project status report, and (5) EPA project manager and technology developer contacts. The profiles also include summaries of demonstration results, if available. The technology description and waste applicability sections are written by the developer. EPA prepares the status and demonstration results sections.

A Trade Name Index and Applicability Index are also included in the back of this document. The Applicability Index is organized by 11 media categories, 19 waste categories, and 14 technology categories.

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