

US EPA ARCHIVE DOCUMENT



Request for Applications to Demonstrate Technologies to Treat Methyl-*t*-Butyl Ether (MTBE)

Fact Sheet and Order Information

The U.S. Environmental Protection Agency (EPA) is announcing a Request for Applications (RFA) to Demonstrate Technologies to Treat Methyl-*t*-Butyl Ether (MTBE) for field demonstrations of MTBE treatment technologies. The RFA will be available in mid April 2000 at <http://www.epa.gov/oust/mtbe/mtbedemo.htm>. Applicants will have approximately 6 weeks to submit proposals. This announcement describes the purpose of the demonstration, the demonstration host site, the technology selection process, and the tentative project schedule.

Background

EPA¹ is engaged in an effort to demonstrate and verify the cost and performance of drinking water treatment technologies and site cleanup methods for MTBE and its by products. The focus of the field demonstrations is to conduct evaluations of field technologies and processes for treatment of drinking water and for groundwater/aquifer materials at the contamination source. The drinking water technologies demonstrated will be above-ground (ex situ) and the aquifer cleanup technologies may be either ex situ (e.g., bioreactor) or in situ (e.g., bioremediation). The results of the evaluations will provide reliable engineering, performance, and cost information for treatment decision makers and technology vendors.

Demonstration Host Site

EPA has selected the Naval Construction Battalion Center (CBC) Port Hueneme, California to host demonstrations of both drinking water and aquifer treatment technologies. The aquifer treatment demonstration will take place at the Naval Exchange (NEX) Service Station site on CBC Port Hueneme. Based on NEX Gasoline Station inventory records, approximately 4,000 gallons of leaded gasoline and 6,800 gallons of premium unleaded gasoline containing MTBE were released from product delivery lines into the subsurface between September 1984 and March 1985. The area considered to be the source area consists of a 9-acre MTBE plume with the BTEX compounds (benzene, toluene, ethylbenzene, and isomers of xylene) extending more than 1,200 feet from the release site. The MTBE dissolved plume extends another 36 acres. The plume is located primarily under open hardstands, parade ground, parking lots, and storage areas.

The geology at the site consists of unconsolidated sands, silts, and clays with minor amounts of gravel and fill material. A shallow semi-perched aquifer is the uppermost groundwater unit. This unit is contained within the first three depositional soil units, which consist of an upper silty sand unit, an underlying fine- to coarse-grained sand unit, and a basal clay unit. The NEX plume is confined within this aquifer and is within 22 feet of the ground surface. For ex-situ treatment technologies, contaminated groundwater can be delivered to the technology system at up to 10 gallons per minute.

Technology Selection

A panel of technology and MTBE experts will select up to a total of six technology vendors to demonstrate drinking water and aquifer treatment. Both in-situ and ex-situ technologies will be considered. This RFA is open to all technology types including biological, chemical, physical and thermal treatment. The tentative schedule for the RFA process is below:

| Milestone | Date |
|----------------------------------|----------------|
| * RFA available | Mid April 2000 |
| * Proposals due | Late May 2000 |
| * Technology selection completed | Late June 2000 |
| * Begin field demonstrations | September 2000 |

The length of field application will depend on the types of technologies selected. Demonstrations may require up to approximately one year. Technology vendors will be responsible for installing and operating their technology at the site for the duration of the demonstration. More information on responsibilities and technology selection criteria are contained in the RFA.

Funding Mechanism

The funding mechanism will be in the form of a Cooperative Research and Development Agreement (CRDA). Funds are not exchanged between EPA and the technology supplier. Prior to the demonstration, the technology supplier(s) and EPA sign the no-funds CRDA, which defines the areas of responsibility.

The RFA (EPA/600/F-00/007) will be available in mid April 2000 at <http://www.epa.gov/oust/mtbe/mtbedemo.htm>. See the website for updates on the schedule. Hard copy will be available from the U.S. EPA/National Service Center for Environmental Publications, P.O. Box 42419, Cincinnati, OH 45242, Telephone: (513) 489-8190 or (800) 490-9198, Facsimile: (513) 489-8695.

Contact

For more information about this RFA only, contact:
Dr. Carl Enfield, 513-569-7489, enfield.carl@epa.gov

¹The Agency has formed a workgroup to plan and conduct the field evaluations. This workgroup consists of staff in the following EPA offices: National Risk Management Research Laboratory (NRMRL); Office of Solid Waste and Emergency Response (OSWER) Office of Underground Storage Tanks and the Technology Innovation Office; Office of Water (OW); Office of Air and Radiation (OAR); and Region 9. In addition, the California Water Quality Resources Control Board, California Department of Health Services, and Los Angeles Regional Water Quality Board are participating on the workgroup.



United States
Environmental Protection Agency
National Service Center for
Environmental Publications
P.O. Box 42419
Cincinnati, OH 45242

Official Business
Penalty for Private Use \$300

EPA/625/F-00/003
April 2000

REQUEST FOR APPLICATIONS TO DEMONSTRATE TECHNOLOGIES TO TREAT METHYL-*t*-BUTYL ETHER (MTBE)

Fact Sheet and Order Information

Order Form

To order *Request for Applications to Demonstrate Technologies to Treat Methyl-*t*-Butyl Ether (MTBE)* (EPA/600/F-00/007), please call 1-800-490-9198, or complete this form and mail or fax it to:

National Service Center for Environmental Publications
P.O. Box 42419
Cincinnati, OH 45242
Fax: (513) 489-8695

Name _____

Company _____

Address _____

City/State/Zip _____

Phone _____ Fax _____ E-mail _____

Download free copies from <<http://www.epa.gov/oust/mtbe/mtbedemo.htm>>