CONTENTS

Abstract ................................................................................................................................................................................. 1
Introduction ........................................................................................................................................................................... 2
Data-Collection Methods ...................................................................................................................................................... 6
Distribution of Volatile Organic Compounds ........................................................................................................................ 7
References Cited ................................................................................................................................................................... 10

FIGURES

1, 2. Maps showing:
   1. Location of study area, Sutton Brook Disposal Area, Tewksbury, Massachusetts................................. 3
   2. Data-collection sites and the distribution of petroleum and chlorinated hydrocarbons detected
      with passive-vapor-diffusion samplers in sediments near the Sutton Brook Disposal Area,
      May 2001....................................................................................................................................................... 4

TABLES

1. Target compounds and reporting limits for passive-vapor-diffusion samples and surface-water samples
   from the Sutton Brook Disposal Area, Tewksbury, Massachusetts, May 2001 .............................................. 7
2. Volatile organic compounds detected in surface-water samples from Sutton Brook, tributaries, and wetland,
   Sutton Brook Disposal Area............................................................................................................................... 8
3. Comparison of volatile organic compound concentrations from original and duplicate passive-vapor-
   diffusion samples in which a volatile organic compound was detected above the reporting limit in both
   samples, Sutton Brook Disposal Area..................................................................................................................... 9
4. Volatile organic compounds detected in passive-vapor-diffusion samples in sediments near the Sutton
   Brook Disposal Area............................................................................................................................................... 13

CONVERSION FACTORS, VERTICAL DATUM, AND ABBREVIATIONS

CONVERSION FACTORS

<table>
<thead>
<tr>
<th>Multiply</th>
<th>By</th>
<th>To obtain</th>
</tr>
</thead>
<tbody>
<tr>
<td>acres</td>
<td>0.405</td>
<td>hectares</td>
</tr>
<tr>
<td>feet (ft)</td>
<td>0.3048</td>
<td>meters</td>
</tr>
<tr>
<td>inches (in.)</td>
<td>2.54</td>
<td>centimeters</td>
</tr>
<tr>
<td>miles (mi)</td>
<td>1.609</td>
<td>kilometers</td>
</tr>
</tbody>
</table>

Temperature in degrees Celsius (°C) can be converted to degrees Fahrenheit (°F) as follows:

°F = 1.8°C + 32

VERTICAL DATUM

Sea level: In this report, “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

ABBREVIATIONS

mL  milliliter
ppb v parts per billion by volume
µg/L  micrograms per liter
mm  millimeter