

**APPENDIX C**

**AMBIENT AIR MONITORING DATA**

**APPENDIX C-1**

**AMBIENT AIR MONITORING  
DATA SUMMARY BY STATION**

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**DIRECTORY OF TOXIC AIR CONTAMINANT  
MONITORING STATIONS**

| <u>Station</u> | <u>Location</u>         | <u>Address</u>                    |
|----------------|-------------------------|-----------------------------------|
| 1014           | Fremont                 | 40733 Chapel Way                  |
| 1017           | Livermore               | 2614 Old First Street             |
| 1018           | Oakland – Davie Stadium | 198 Oak Road                      |
| 1022           | San Leandro             | 15400 Foothill Blvd.              |
| 2011           | Richmond                | 1144 13 <sup>th</sup> Street      |
| 2018           | Concord                 | 2975 Treat Blvd.                  |
| 2019           | Richmond                | 1065 7 <sup>th</sup> Street       |
| 2021           | Bethel Island           | 5551 Bethel Island Road           |
| 2024           | Antioch                 | 1201 W. 10 <sup>th</sup> Street   |
| 2030           | San Pablo               | Unit 759, El Portal Center        |
| 3005           | San Rafael              | 534 4 <sup>th</sup> Street        |
| 3007           | Fort Cronkhite          | Building 1049                     |
| 4001           | Napa                    | 2552 Jefferson Street             |
| 5011           | San Francisco           | 10 Arkansas Street                |
| 6004           | Redwood City            | 897 Barron Avenue                 |
| 7009           | San Jose                | 120B North 4 <sup>th</sup> Street |
| 7013           | Mountain View           | 160 Cuesta Drive                  |
| 8004           | Vallejo                 | 304 Tuolumne Street               |
| 9004           | Santa Rosa              | 837 5 <sup>th</sup> Street        |

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
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**Pollutant Key**

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|                         |          |                                |
|-------------------------|----------|--------------------------------|
| <b>VC</b>               | <b>=</b> | <b>Vinyl Chloride</b>          |
| <b>DCM</b>              | <b>=</b> | <b>Methylene Chloride</b>      |
| <b>CHCl<sub>3</sub></b> | <b>=</b> | <b>Chloroform</b>              |
| <b>EDC</b>              | <b>=</b> | <b>Ethylene Dichloride</b>     |
| <b>TCA</b>              | <b>=</b> | <b>Methyl Chloroform</b>       |
| <b>CCl<sub>4</sub></b>  | <b>=</b> | <b>Carbon Tetrachloride</b>    |
| <b>TCE</b>              | <b>=</b> | <b>Trichloroethylene</b>       |
| <b>BENZ</b>             | <b>=</b> | <b>Benzene</b>                 |
| <b>EDB</b>              | <b>=</b> | <b>Ethylene Dibromide</b>      |
| <b>PERC</b>             | <b>=</b> | <b>Perchloroethylene</b>       |
| <b>TOL</b>              | <b>=</b> | <b>Toluene</b>                 |
| <b>BUT-1,3</b>          | <b>=</b> | <b>1,3-Butadiene **</b>        |
| <b>MTBE</b>             | <b>=</b> | <b>Methyl Tert Butyl Ether</b> |

**\*\* 1994 is the first year in which 1,3-Butadiene levels were monitored by the District.**

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: Fremont-Chapel Way  
40733 Chapel Way  
Fremont, CA 94538

(P)

ID# 1014  
arb\_no 06000336  
al rs\_n06001100100

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .90  | < .02 | .05  | 2.00 | .60      | 2.40  |
| 17Jan98  | < .30 | .70   | < .02 | < .10 | .11 | .10  | < .08 | 1.10 | < .02 | .09  | 2.50 | .70      | 3.00  |
| 29Jan98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .70  | < .02 | .05  | 1.70 | .60      | 1.80  |
| 12Feb98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .70  | < .02 | .17  | 1.50 | .60      | 1.80  |
| 25Feb98  | < .30 | 1.00  | < .02 | < .10 | .13 | .10  | < .08 | 1.00 | < .02 | .25  | 1.90 | .80      | 2.30  |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .90  | < .02 | .06  | 1.60 | .70      | 2.00  |
| 18Mar98  | < .30 | .50   | < .02 | < .10 | .08 | .09  | < .08 | .70  | < .02 | .09  | 2.30 | .60      | 2.00  |
| 30Mar98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .80  | < .02 | .07  | 1.70 | < .30    | 1.60  |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .40  | < .02 | .05  | .60  | < .30    | .70   |
| 23Apr98  | < .30 | .50   | < .02 | < .10 | .06 | .09  | < .08 | .30  | < .02 | .03  | .50  | < .30    | .50   |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .13 | .09  | < .08 | .60  | < .02 | .05  | 2.50 | .70      | 1.90  |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .40  | < .02 | .02  | .70  | .40      | .80   |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .70  | < .02 | .08  | 1.70 | .40      | .70   |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .30  | < .02 | .05  | .60  | .50      | .50   |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .20  | < .02 | .03  | .50  | < .30    | < .50 |
| 04Jul 98 | < .30 | .50   | < .02 | < .10 | .08 | .10  | < .08 | .30  | < .02 | .03  | .60  | .40      | < .50 |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | 1.00 | < .02 | .10  | 2.70 | .60      | 3.50  |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .20  | < .02 | .03  | .70  | .40      | .90   |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .20  | < .02 | .03  | 1.10 | .40      | 1.10  |
| 21Aug98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .50  | < .02 | .07  | 1.00 | .60      | 1.10  |
| 02Sep98  | < .30 | .70   | < .02 | < .10 | .15 | .10  | < .08 | 1.00 | < .02 | .12  | 2.80 | .80      | 2.70  |
| 14Sep98  | < .30 | 1.80  | .04   | < .10 | .12 | .10  | .11   | 1.10 | < .02 | .10  | 2.90 | 1.00     | 2.90  |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .80  | < .02 | .05  | 1.50 | .60      | .90   |
| 08Oct98  | < .30 | 1.20  | < .02 | < .10 | .15 | .11  | < .08 | .70  | < .02 | .08  | 1.80 | .60      | 1.60  |
| 20Oct98  | < .30 | 1.60  | < .02 | < .10 | .20 | .10  | < .08 | 1.40 | < .02 | .26  | 4.20 | .30      | 4.20  |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .10 | .09  | < .08 | .90  | < .02 | .07  | 2.50 | .30      | 1.70  |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | 1.00 | < .02 | .07  | 2.00 | .60      | 1.80  |
| 25Nov98  | < .30 | .80   | < .02 | < .10 | .09 | .09  | < .08 | 1.20 | < .02 | .12  | 3.40 | .70      | 3.10  |
| 07Dec98  | < .30 | 1.10  | < .02 | < .10 | .09 | .09  | < .08 | 1.30 | < .02 | .15  | 2.70 | .80      | 2.10  |
| 19Dec98  | < .30 | 1.20  | < .02 | < .10 | .05 | .10  | < .08 | .60  | < .02 | .04  | 2.30 | < .30    | .70   |
| 31Dec98  | < .30 | .50   | < .02 | < .10 | .11 | .10  | < .08 | 1.00 | < .02 | .08  | 2.30 | .80      | 1.80  |
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31   | 31    | 31   | 31    | 31   | 31   | 31       | 31    |
| # < LOD  | 31    | 18    | 30    | 31    |     |      | 30    |      | 31    |      | 4    |          | 2     |
| Max      | < .30 | 1.80  | .04   | < .10 | .20 | .11  | .11   | 1.40 | < .02 | .26  | 4.20 | 1.00     | 4.20  |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .20  | < .02 | .02  | .50  | < .30    | .50   |
| Mean*    | < .30 | .54   | .01   | < .10 | .10 | .10  | .04   | .74  | < .02 | .08  | 1.83 | .53      | 1.70  |
| Std dev* |       | .44   | .01   |       | .03 | .01  | .01   | .34  |       | .06  | .93  | .22      | 1.00  |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: Livermore-Old First St  
2614 Old-First Street  
Livermore, CA 94550

(P)

ID# 1017  
arb\_no 06000340  
alrs\_n06001000300

| Date    | VC    | DCM   | CHC13 | EDC   | TCA  | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|---------|-------|-------|-------|-------|------|------|-------|------|-------|------|------|----------|-------|
| 05Jan98 | < .30 | < .50 | < .02 | < .10 | .24  | .10  | < .08 | 1.60 | < .02 | .10  | 5.50 | .90      | 9.00  |
| 17Jan98 | < .30 | < .50 | < .02 | < .10 | .16  | .10  | < .08 | 1.20 | < .02 | .18  | 3.20 | .60      | 8.20  |
| 29Jan98 | < .30 | < .50 | < .02 | < .10 | .09  | .10  | < .08 | .70  | < .02 | .28  | 1.40 | < .30    | 1.20  |
| 10Feb98 | < .30 | 1.20  | < .02 | < .10 | .27  | .10  | < .08 | 1.00 | < .02 | .20  | 2.80 | .60      | 3.60  |
| 22Feb98 | < .30 | < .50 | < .08 | < .10 | .10  | .09  | .22   | .80  | < .02 | .04  | 1.80 | < .30    | 3.00  |
| 06Mar98 | < .30 | < .50 | < .02 | < .10 | .11  | .10  | < .08 | .60  | < .02 | .23  | 1.20 | < .30    | 1.70  |
| 18Mar98 | < .30 | < .50 | < .02 | < .10 | .17  | .10  | < .08 | .80  | < .02 | .10  | 2.10 | .40      | 4.10  |
| 30Mar98 | < .30 | .60   | < .02 | < .10 | .13  | .10  | < .08 | .70  | < .02 | .14  | 1.30 | < .30    | 2.00  |
| 11Apr98 | < .30 | .80   | < .02 | < .10 | .11  | .10  | < .08 | .30  | < .02 | .04  | .60  | < .30    | .60   |
| 23Apr98 | < .30 | < .50 | < .02 | < .10 | .09  | .10  | < .08 | .40  | < .02 | .06  | .90  | < .30    | 1.20  |
| 05May98 | < .30 | < .50 | < .02 | < .10 | .16  | .10  | < .08 | .60  | < .02 | .10  | 2.60 | < .30    | 2.40  |
| 17May98 | < .30 | < .50 | < .02 | < .10 | .13  | .10  | < .08 | .20  | < .02 | .02  | .80  | < .30    | 1.10  |
| 29May98 | < .30 | < .50 | < .02 | < .10 | .12  | .10  | < .08 | .30  | < .02 | .09  | .70  | .30      | .70   |
| 10Jun98 | < .30 | .80   | < .02 | < .10 | .13  | .09  | < .08 | .20  | < .02 | .17  | .60  | < .30    | < .50 |
| 22Jun98 | < .30 | .60   | < .02 | < .10 | .13  | .10  | < .08 | .40  | < .02 | .26  | 1.00 | < .30    | .80   |
| 04Jul98 | < .30 | .50   | < .02 | < .10 | .14  | .09  | < .08 | .30  | < .02 | .03  | .70  | < .30    | .60   |
| 16Jul98 | < .30 | < .50 | < .02 | < .10 | .15  | .09  | < .08 | .70  | < .02 | .18  | 2.10 | < .30    | 2.90  |
| 28Jul98 | < .30 | < .50 | < .02 | < .10 | .16  | .10  | < .08 | .30  | < .02 | .31  | .70  | < .30    | .80   |
| 09Aug98 | < .30 | < .50 | < .02 | < .10 | .27  | .10  | < .08 | .20  | < .02 | .04  | .70  | .30      | .80   |
| 21Aug98 | < .30 | < .50 | < .02 | < .10 | .11  | .10  | < .08 | .40  | < .02 | .12  | 1.20 | .40      | 1.60  |
| 02Sep98 | < .30 | .50   | < .02 | < .10 | .16  | .10  | < .08 | .80  | < .02 | .31  | 2.50 | .30      | 2.70  |
| 14Sep98 | < .30 | .50   | < .02 | < .10 | .15  | .10  | < .08 | .60  | < .02 | .11  | 1.90 | < .30    | 1.70  |
| 26Sep98 | < .30 | < .50 | < .02 | < .10 | .15  | .11  | < .08 | .40  | < .02 | .08  | .90  | .40      | 1.10  |
| 08Oct98 | < .30 | < .50 | < .02 | < .10 | .16  | .11  | < .08 | .40  | < .02 | .38  | .90  | .40      | .80   |
| 20Oct98 | < .30 | < .50 | .04   | < .10 | .46  | .11  | < .08 | .80  | < .02 | .19  | 3.10 | .30      | 3.80  |
| 01Nov98 | < .30 | .50   | .02   | < .10 | .23  | .10  | < .08 | .70  | < .02 | .09  | 1.70 | .50      | 1.70  |
| 13Nov98 | < .30 | < .50 | < .02 | < .10 | 2.29 | .11  | < .08 | 1.50 | < .02 | .24  | 3.20 | .30      | 4.00  |
| 25Nov98 | < .30 | < .50 | < .02 | < .10 | .38  | .10  | < .08 | 1.30 | < .02 | .17  | 3.20 | .60      | 3.90  |
| 07Dec98 | < .30 | < .50 | < .02 | < .10 | .19  | .11  | < .08 | 1.60 | < .02 | .12  | 3.30 | 1.00     | 3.80  |
| 19Dec98 | < .30 | < .50 | < .02 | < .10 | .15  | .10  | < .08 | .60  | < .02 | .08  | 1.20 | < .30    | .80   |
| 31Dec98 | < .30 | .80   | < .02 | < .10 | .16  | .09  | < .08 | .70  | < .02 | .18  | 1.40 | < .30    | 1.50  |

|          |       |       |       |       |      |     |       |      |       |     |      |       |       |
|----------|-------|-------|-------|-------|------|-----|-------|------|-------|-----|------|-------|-------|
| # OBS    | 31    | 31    | 31    | 31    | 31   | 31  | 31    | 31   | 31    | 31  | 31   | 31    | 31    |
| # < LOD  | 31    | 21    | 29    | 31    |      |     | 30    |      | 31    |     |      | 16    | 1     |
| Max      | < .30 | 1.20  | < .08 | < .10 | 2.29 | .11 | .22   | 1.60 | < .02 | .38 | 5.50 | 1.00  | 9.00  |
| Min      | < .30 | < .50 | < .02 | < .10 | .09  | .09 | < .08 | .20  | < .02 | .02 | .60  | < .30 | < .50 |
| Mean*    | < .30 | .39   | .01   | < .10 | .24  | .10 | .05   | .68  | < .02 | .15 | 1.78 | .31   | 2.33  |
| Std dev* |       | .24   | .01   |       | .39  | .01 | .03   | .40  |       | .09 | 1.14 | .23   | 2.06  |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: Oakl and-Davi e Stadl um  
198 Oak Road  
Oakl and, CA 94610

(P)

ID# 1018  
arb\_no 06000342  
al rs\_no 060000000

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .70  | < .02 | .09  | 3.70 | < .30    | 2.30  |
| 17Jan98  | < .30 | .70   | < .02 | < .10 | .12 | .11  | < .08 | .40  | < .02 | .05  | 1.20 | .50      | 1.20  |
| 29Jan98  | < .30 | < .50 | < .02 | < .10 | .13 | .10  | < .08 | .40  | < .02 | .04  | .90  | < .30    | .80   |
| 12Feb98  | < .30 | .80   | < .02 | < .10 | .11 | .11  | < .08 | .50  | < .02 | .04  | .90  | .30      | .90   |
| 22Feb98  | < .30 | < .50 | < .02 | < .10 | .20 | .10  | < .08 | .40  | < .02 | .04  | .70  | .30      | .90   |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .30  | < .02 | .03  | 1.00 | < .30    | .50   |
| 18Mar98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .50  | < .02 | .12  | 1.30 | .30      | 1.20  |
| 30Mar98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .50  | < .02 | .05  | 1.00 | .30      | .80   |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .10  | < .02 | .02  | .20  | < .30    | < .50 |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .05 | .11  | < .08 | .20  | < .02 | .02  | .40  | < .30    | < .50 |
| 11May98  | < .30 | < .50 | < .02 | < .10 | .11 | .09  | < .08 | .30  | < .02 | .07  | .50  | < .30    | < .50 |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .20  | < .02 | .02  | 1.00 | < .30    | .50   |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .30  | < .02 | .07  | .70  | < .30    | .60   |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .13 | .10  | < .08 | .30  | < .02 | .07  | .60  | .30      | .50   |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .10  | < .02 | .05  | .40  | < .30    | < .50 |
| 04Jul 98 | < .30 | < .50 | < .02 | < .10 | .08 | .11  | < .08 | .30  | < .02 | .03  | .60  | < .30    | .70   |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .18 | .09  | < .08 | .80  | < .02 | .16  | 1.80 | .40      | 2.00  |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .30  | < .02 | .03  | .50  | < .30    | < .50 |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | .20  | < .02 | .03  | .60  | < .30    | < .50 |
| 21Aug98  | < .30 | .50   | < .02 | < .10 | .14 | .10  | < .08 | .30  | < .02 | .06  | 1.00 | < .30    | .70   |
| 02Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .50  | < .02 | .08  | 1.60 | .30      | .90   |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .10 | .09  | < .08 | .30  | < .02 | .04  | .50  | < .30    | < .50 |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .11  | < .08 | .40  | < .02 | .04  | .70  | .30      | .50   |
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .40  | < .02 | .03  | 1.00 | < .30    | .70   |
| 20Oct98  | < .30 | < .50 | .03   | < .10 | .08 | .10  | < .08 | .90  | < .02 | .11  | 2.70 | < .30    | 2.00  |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .60  | < .02 | .05  | 1.30 | < .30    | .90   |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .08 | .11  | < .08 | .60  | < .02 | .05  | 1.40 | < .30    | 1.00  |
| 25Nov98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .70  | < .02 | .07  | 1.30 | < .30    | .90   |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .70  | < .02 | .10  | 1.60 | < .30    | .60   |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .09 | .11  | < .08 | .20  | < .02 | .03  | .40  | < .30    | < .50 |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .10 | .11  | < .08 | .70  | < .02 | .07  | 1.30 | < .30    | .90   |
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31   | 31    | 31   | 31    | 31   | 31   | 31       | 31    |
| # < LOD  | 31    | 28    | 30    | 31    |     |      | 31    |      | 31    |      |      | 22       | 8     |
| Max      | < .30 | .80   | .03   | < .10 | .20 | .11  | < .08 | .90  | < .02 | .16  | 3.70 | .50      | 2.30  |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .10  | < .02 | .02  | .20  | < .30    | .50   |
| Mean*    | < .30 | .29   | .01   | < .10 | .09 | .10  | < .08 | .42  | < .02 | .06  | 1.06 | .20      | .77   |
| Std dev* |       | .13   | .00   |       | .04 | .01  |       | .21  |       | .03  | .71  | .09      | .53   |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: San Leandro  
15400 Foothill Boulevard  
San Leandro, CA 94578

(P)

ID# 1022  
arb\_no 06000343  
al rs\_n06001000600

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .50  | < .02 | .03  | 1.10 | < .30    | 1.00  |
| 17Jan98  | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .60  | < .02 | .05  | 1.30 | .60      | 1.40  |
| 29Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .11  | < .08 | .40  | < .02 | .05  | .70  | < .30    | .70   |
| 10Feb98  | < .30 | < .50 | < .02 | < .10 | .10 | .11  | < .08 | .50  | < .02 | .04  | .80  | .40      | .90   |
| 22Feb98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .40  | < .02 | .03  | .70  | .40      | .60   |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .30  | < .02 | .04  | .60  | .30      | .70   |
| 18Mar98  | < .30 | .50   | < .02 | < .10 | .09 | .10  | < .08 | .70  | < .02 | .10  | 1.40 | .60      | 1.40  |
| 30Mar98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .50  | < .02 | .03  | .80  | < .30    | .60   |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .20  | < .02 | .05  | .40  | .40      | < .50 |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .30  | < .02 | .02  | .50  | .40      | < .50 |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .09 | .09  | < .08 | .30  | < .02 | .08  | .50  | .30      | < .50 |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .20  | < .02 | .02  | .40  | < .30    | < .50 |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .15 | .10  | < .08 | .30  | < .02 | .02  | .50  | .40      | .60   |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .06 | .11  | < .08 | .30  | < .02 | .03  | .50  | .40      | < .50 |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .20  | < .02 | .02  | .40  | .30      | < .50 |
| 04Jul 98 | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .20  | < .02 | .02  | .50  | .30      | < .50 |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .80  | < .02 | .09  | 2.10 | .60      | 1.80  |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .20  | < .02 | .02  | .40  | .40      | < .50 |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .20  | < .02 | .02  | .50  | .30      | < .50 |
| 21Aug98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .40  | < .02 | .07  | 1.10 | .50      | .60   |
| 02Sep98  | < .30 | < .50 | .04   | < .10 | .12 | .12  | < .08 | 1.20 | < .02 | .16  | 2.70 | < .30    | 2.20  |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .50  | < .02 | .09  | 1.30 | < .30    | 1.00  |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .20  | < .02 | .02  | .40  | < .30    | < .50 |
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .09 | .11  | < .08 | .50  | < .02 | .05  | 1.20 | .50      | 1.00  |
| 20Oct98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .60  | < .02 | .02  | 1.40 | .50      | 1.20  |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .50  | < .02 | .02  | 1.30 | .30      | .90   |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .08 | .11  | < .08 | .50  | < .02 | .06  | 1.00 | .50      | 1.00  |
| 25Nov98  | < .30 | < .50 | < .02 | < .10 | .09 | .11  | < .08 | .50  | < .02 | .06  | 1.00 | .40      | 1.00  |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .11 | .12  | < .08 | .70  | < .02 | .07  | 1.80 | .30      | 1.00  |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .10 | .11  | < .08 | .30  | < .02 | .03  | .60  | < .30    | .50   |
| # OBS    | 30    | 30    | 30    | 30    | 30  | 30   | 30    | 30   | 30    | 30   | 30   | 30       | 30    |
| # < LOD  | 30    | 29    | 29    | 30    |     |      | 30    |      | 30    |      | 8    |          | 10    |
| Max      | < .30 | < .50 | .04   | < .10 | .15 | .12  | < .08 | 1.20 | < .02 | .16  | 2.70 | .60      | 2.20  |
| Min      | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .20  | < .02 | .02  | .40  | < .30    | < .50 |
| Mean*    | < .30 | .26   | .01   | < .10 | .08 | .10  | < .08 | .43  | < .02 | .05  | .93  | .34      | .75   |
| Std dev* |       | .05   | .01   |       | .02 | .01  |       | .22  |       | .03  | .56  | .15      | .50   |

\* Includes Obs < LOD as 1/2 LOD



BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
 TOXIC AIR CONTAMINANTS  
 1998 ANNUAL REPORT  
 DECEMBER 1999

Ambient Air Toxics Data – Gases (ppb)  
 Date Range: Jan 1, 1998 – Dec 31, 1998

Station: Concord - Treat Blvd  
 2975 Treat Boulevard  
 Concord, CA 94518

(P)

ID# 2018  
 arb\_no 00700440  
 al\_rs\_n06013000200

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98  | < .30 | < .50 | < .02 | < .10 | .15 | .10  | < .08 | 1.40 | < .02 | .05  | 5.60 | .80      | 3.80  |
| 17Jan98  | < .30 | < .50 | < .02 | < .10 | .12 | .09  | < .08 | 1.10 | < .02 | .18  | 3.20 | .90      | 3.70  |
| 29Jan98  | < .30 | < .50 | < .02 | < .10 | .11 | .09  | < .08 | .50  | < .02 | .03  | 1.30 | .60      | 1.10  |
| 10Feb98  | < .30 | .60   | < .02 | < .10 | .31 | .11  | < .08 | .90  | < .02 | .07  | 2.40 | .90      | 2.30  |
| 22Feb98  | < .30 | < .50 | < .02 | < .10 | .21 | .09  | < .08 | .60  | < .02 | .07  | 1.30 | .30      | 1.00  |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .19 | .10  | < .08 | .60  | < .02 | .08  | 1.40 | .60      | 1.30  |
| 18Mar98  | < .30 | .60   | < .02 | < .10 | .30 | .10  | < .08 | .60  | < .02 | .06  | 1.90 | .50      | 1.60  |
| 30Mar98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .50  | < .02 | .03  | 1.50 | .50      | .90   |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .07 | .11  | < .08 | .30  | < .02 | .02  | .80  | .30      | < .50 |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | .20  | < .02 | .02  | .90  | .40      | < .50 |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | .40  | < .02 | .08  | 1.80 | .60      | 1.10  |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .20  | < .02 | .02  | .80  | < .30    | < .50 |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .30  | < .02 | .04  | 1.10 | .40      | .50   |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .20  | < .02 | .02  | 1.10 | .30      | < .50 |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .30  | < .02 | .02  | 1.20 | .40      | < .50 |
| 04Jul 98 | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .20  | < .02 | .01  | 1.20 | .50      | < .50 |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .09 | .09  | < .08 | .40  | < .02 | .06  | 1.80 | .60      | 1.40  |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .30  | < .02 | .03  | 1.40 | .40      | .50   |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .20  | < .02 | .02  | 1.30 | < .30    | .50   |
| 21Aug98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .30  | < .02 | .04  | 1.50 | .40      | .90   |
| 02Sep98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .50  | < .02 | .09  | 2.50 | .50      | 2.60  |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .09 | .12  | < .08 | .50  | < .02 | .05  | 2.30 | .30      | 1.40  |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .50  | < .02 | .03  | 1.70 | .60      | .70   |
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .40  | < .02 | .04  | 1.40 | < .30    | .60   |
| 20Oct98  | < .30 | < .50 | .03   | < .10 | .11 | .10  | < .08 | 1.40 | < .02 | .12  | 4.40 | .40      | 3.60  |
| 01Nov98  | < .30 | .60   | < .02 | < .10 | .11 | .11  | < .08 | .80  | < .02 | .04  | 2.20 | .80      | 1.50  |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | 1.30 | < .02 | .07  | 3.00 | .80      | 2.50  |
| 25Nov98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | 1.00 | < .02 | .09  | 2.60 | .80      | 1.90  |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .09 | .09  | < .08 | 1.40 | < .02 | .09  | 3.50 | 1.10     | 2.10  |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .40  | < .02 | .03  | 1.20 | < .30    | < .50 |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .80  | < .02 | .05  | 1.50 | < .30    | .50   |
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31   | 31    | 31   | 31    | 31   | 31   | 31       | 31    |
| # < LOD  | 31    | 28    | 30    | 31    |     |      | 31    |      | 31    |      |      | 5        | 7     |
| Max      | < .30 | .60   | .03   | < .10 | .31 | .12  | < .08 | 1.40 | < .02 | .18  | 5.60 | 1.10     | 3.80  |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .20  | < .02 | .01  | .80  | .30      | < .50 |
| Mean*    | < .30 | .28   | .01   | < .10 | .11 | .10  | < .08 | .60  | < .02 | .05  | 1.93 | .50      | 1.28  |
| Std dev* |       | .11   | .00   |       | .06 | .01  |       | .39  |       | .04  | 1.08 | .25      | 1.07  |

\* Includes Obs < LOD as 1/2 LOD

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
 TOXIC AIR CONTAMINANTS  
 1998 ANNUAL REPORT  
 DECEMBER 1999

Ambient Air Toxics Data – Gases (ppb)  
 Date Range: Jan 1, 1998 – Dec 31, 1998

Station: Richmond - 7th St  
 1065-7th Street  
 Richmond, CA 94801

(P)

ID# 2019  
 arb\_no 00700441  
 al rs\_n06013000600

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .70  | < .02 | .05  | 1.60 | < .30    | 1.80  |
| 17Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .70  | < .02 | .04  | 1.80 | .40      | 2.20  |
| 29Jan98  | < .30 | .60   | < .02 | < .10 | .07 | .10  | < .08 | .40  | < .02 | .05  | 2.40 | < .30    | 1.50  |
| 10Feb98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .70  | < .02 | .06  | 1.60 | .40      | 1.60  |
| 22Feb98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .60  | < .02 | .04  | 1.50 | < .30    | 1.70  |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .40  | < .02 | .02  | 1.10 | < .30    | .70   |
| 18Mar98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .60  | < .02 | .05  | 1.80 | < .30    | 1.30  |
| 30Mar98  | < .30 | 1.50  | < .02 | < .10 | .07 | .10  | < .08 | .60  | < .02 | .03  | 7.60 | .60      | 1.50  |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .30  | < .02 | .01  | .50  | < .30    | 1.10  |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .60  | < .02 | .01  | 2.30 | < .30    | .60   |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .30  | < .02 | .02  | 2.00 | < .30    | 2.00  |
| 29May98  | < .30 | .90   | < .02 | < .10 | .07 | .10  | < .08 | .40  | < .02 | .02  | 3.60 | < .30    | 6.00  |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .20  | < .02 | .02  | 1.80 | < .30    | .60   |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .10  | < .02 | .02  | 1.10 | .30      | .60   |
| 04Jul 98 | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .10  | < .02 | .01  | .30  | < .30    | < .50 |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .30  | < .02 | .02  | .80  | < .30    | .60   |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .20  | < .02 | .01  | .90  | < .30    | .50   |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .10  | < .02 | .01  | .30  | < .30    | .50   |
| 21Aug98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .30  | < .02 | .03  | 1.10 | < .30    | .70   |
| 03Sep98  | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | .40  | < .02 | .04  | 1.50 | < .30    | 1.20  |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .20  | < .02 | .02  | .40  | < .30    | .50   |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .50  | < .02 | .03  | 2.10 | .50      | 1.00  |
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .08 | .11  | < .08 | .30  | < .02 | .02  | 1.50 | < .30    | 1.00  |
| 20Oct98  | < .30 | .50   | .05   | < .10 | .10 | .10  | < .08 | 1.20 | < .02 | .10  | 4.20 | .40      | 2.80  |
| 01Nov98  | < .30 | < .50 | .03   | < .10 | .07 | .10  | < .08 | .60  | < .02 | .02  | 1.90 | .50      | .90   |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .10 | .11  | < .08 | 1.00 | < .02 | .09  | 2.60 | .30      | 1.90  |
| 25Nov98  | < .30 | .60   | < .02 | < .10 | .08 | .10  | < .08 | 1.20 | < .02 | .10  | 3.00 | < .30    | 1.60  |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .10 | .11  | < .08 | 1.00 | < .02 | .10  | 4.10 | .70      | 1.50  |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .05 | .11  | < .08 | .30  | < .02 | .03  | 1.10 | < .30    | < .50 |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .08 | .11  | < .08 | .70  | < .02 | .03  | 2.00 | .40      | .90   |

|          |       |       |       |       |     |     |       |      |       |     |      |       |       |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|-----|------|-------|-------|
| # OBS    | 30    | 30    | 30    | 30    | 30  | 30  | 30    | 30   | 30    | 30  | 30   | 30    | 30    |
| # < LOD  | 30    | 25    | 28    | 30    |     |     | 30    |      | 30    |     |      | 20    | 2     |
| Max      | < .30 | 1.50  | .05   | < .10 | .11 | .11 | < .08 | 1.20 | < .02 | .10 | 7.60 | .70   | 6.00  |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09 | < .08 | .10  | < .02 | .01 | .30  | < .30 | < .50 |
| Mean*    | < .30 | .34   | .01   | < .10 | .08 | .10 | < .08 | .50  | < .02 | .04 | 1.95 | .25   | 1.31  |
| Std dev* |       | .26   | .01   |       | .01 | .00 |       | .31  |       | .03 | 1.47 | .16   | 1.08  |

\* Includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: Bethel Island (P)  
5551 Bethel Island Road  
Bethel Island, CA 94511

ID# 2021  
arb\_no 00700442  
al rs\_n06013100200

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 30Mar98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .40  | < .02 | .02  | .70  | < .30    | < .50 |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .30  | < .02 | .01  | .50  | < .30    | .50   |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .10  | < .02 | .01  | .30  | < .30    | < .50 |
| 05May98  | < .30 | .80   | < .02 | < .10 | .11 | .15  | < .08 | .20  | < .02 | .17  | .60  | .30      | .70   |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .20  | < .02 | .02  | .30  | < .30    | < .50 |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .30  | < .02 | .02  | .50  | < .30    | < .50 |
| 10Jun98  | < .30 | .50   | < .02 | < .10 | .11 | .11  | < .08 | .20  | < .02 | .01  | .40  | < .30    | .60   |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .09 | .11  | < .08 | .20  | < .02 | .02  | .50  | < .30    | .50   |
| 04Jul 98 | < .30 | .60   | < .02 | < .10 | .05 | .11  | < .08 | .20  | < .02 | .01  | .40  | < .30    | .60   |
| 16Jul 98 | < .30 | .50   | < .02 | < .10 | .12 | .11  | < .08 | .50  | < .02 | .02  | .90  | < .30    | 1.20  |
| 28Jul 98 | < .30 | .60   | < .02 | < .10 | .08 | .18  | < .08 | .20  | < .02 | .03  | .50  | < .30    | .50   |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .09 | .15  | < .08 | .20  | < .02 | .02  | .50  | .30      | .60   |
| 21Aug98  | < .30 | .60   | < .02 | < .10 | .14 | .10  | < .08 | .40  | < .02 | .02  | .80  | .40      | 1.20  |
| 02Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .30  | < .02 | .02  | .70  | .40      | .90   |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .11  | < .08 | .30  | < .02 | .02  | .60  | .30      | .90   |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .20  | < .02 | .01  | .40  | < .30    | < .50 |
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .30  | < .02 | .02  | .60  | < .30    | .50   |
| 20Oct98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .70  | < .02 | .05  | 1.80 | .30      | 1.40  |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .60  | < .02 | .01  | 1.10 | .40      | .70   |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | 1.20 | < .02 | .03  | 2.20 | < .30    | 2.00  |
| 25Nov98  | < .30 | < .50 | < .02 | < .10 | .11 | .11  | < .08 | .60  | < .02 | .04  | 1.20 | .30      | 1.20  |
| 07Dec98  | < .30 | 1.30  | < .02 | < .10 | .10 | .12  | < .08 | .50  | < .02 | .02  | .90  | .40      | 1.00  |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .09 | .12  | < .08 | .20  | < .02 | .02  | .40  | < .30    | < .50 |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .08 | .13  | < .08 | .60  | < .02 | .04  | 1.10 | .50      | 1.30  |

|          |       |       |       |       |     |     |       |      |       |     |      |       |       |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|-----|------|-------|-------|
| # OBS    | 24    | 24    | 24    | 24    | 24  | 24  | 24    | 24   | 24    | 24  | 24   | 24    | 24    |
| # < LOD  | 24    | 17    | 24    | 24    |     |     | 24    |      | 24    |     |      | 14    | 6     |
| Max      | < .30 | 1.30  | < .02 | < .10 | .14 | .18 | < .08 | 1.20 | < .02 | .17 | 2.20 | .50   | 2.00  |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09 | < .08 | .10  | < .02 | .01 | .30  | < .30 | < .50 |
| Mean*    | < .30 | .38   | < .30 | < .10 | .08 | .11 | < .08 | .37  | < .02 | .03 | .75  | .24   | .74   |
| Std dev* |       | .25   |       |       | .02 | .02 |       | .24  |       | .03 | .47  | .11   | .46   |

\* Includes Obs < LOD as 1/2 LOD

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
 TOXIC AIR CONTAMINANTS  
 1998 ANNUAL REPORT  
 DECEMBER 1999

Ambient Air Toxics Data – Gases (ppb)  
 Date Range: Jan 1, 1998 – Dec 31, 1998

Station: Antioch  
 1201 W 10th Street  
 Antioch, CA 94509

(P)

ID# 2024  
 arb\_no 0  
 al rs\_no 060000000

| Date    | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE |
|---------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|------|
| 05Jan98 | < .30 | < .50 | < .02 | < .10 | .13 | .11  | < .08 | 1.10 | < .02 | .01  | 3.30 | .80      | 3.30 |
| 17Jan98 | < .30 | .60   | < .02 | < .10 | .11 | .13  | < .08 | .80  | < .02 | .12  | 1.60 | .40      | 2.70 |
| 29Jan98 | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .60  | < .02 | .03  | 1.10 | .40      | 1.50 |
| 22Feb98 | < .30 | .60   | < .02 | < .10 | .09 | .12  | < .08 | .60  | < .02 | .05  | 1.20 | < .30    | 1.30 |
| 06Mar98 | < .30 | < .50 | < .02 | < .10 | .10 | .18  | < .08 | .40  | < .02 | .04  | .08  | < .30    | 1.00 |
| 18Mar98 | < .30 | .60   | < .02 | < .10 | .07 | .54  | < .08 | .50  | < .02 | .21  | 1.90 | < .30    | 1.40 |

|          |       |       |       |       |     |     |       |      |       |     |      |       |      |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|-----|------|-------|------|
| # OBS    | 6     | 6     | 6     | 6     | 6   | 6   | 6     | 6    | 6     | 6   | 6    | 6     | 6    |
| # < LOD  | 6     | 3     | 6     | 6     |     |     | 6     |      | 6     |     |      | 3     |      |
| Max      | < .30 | .60   | < .02 | < .10 | .13 | .54 | < .08 | 1.10 | < .02 | .21 | 3.30 | .80   | 3.30 |
| Min      | < .30 | < .50 | < .02 | < .10 | .07 | .10 | < .08 | .40  | < .02 | .01 | .08  | < .30 | 1.00 |
| Mean*    | < .30 | .43   | < .30 | < .10 | .09 | .20 | < .08 | .67  | < .02 | .08 | 1.53 | .34   | 1.87 |
| Std dev* |       | .19   |       |       | .02 | .17 |       | .25  |       | .08 | 1.06 | .26   | .91  |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: San Pablo-El Portal Center (P)  
Unit 759  
San Pablo, CA 94806

ID# 2030  
arb\_no 00700445  
alrs\_n06013100300

| Date    | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|---------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98 | < .30 | < .50 | < .02 | < .10 | .29 | .10  | < .08 | .50  | < .02 | .03  | 1.20 | < .30    | 1.20  |
| 17Jan98 | < .30 | < .50 | < .08 | < .10 | .34 | .10  | .10   | .60  | < .02 | .13  | 1.60 | .40      | 1.90  |
| 29Jan98 | < .30 | < .50 | < .02 | < .10 | .21 | .10  | .08   | .50  | < .02 | .10  | 1.20 | .30      | 1.30  |
| 10Feb98 | < .30 | < .50 | < .02 | < .10 | .28 | .10  | .09   | .60  | < .02 | .15  | 1.60 | .30      | 1.70  |
| 22Feb98 | < .30 | < .50 | < .02 | < .10 | .28 | .10  | .08   | .60  | < .02 | .06  | 1.10 | .40      | 1.60  |
| 06Mar98 | < .30 | < .50 | < .02 | < .10 | .24 | .10  | < .08 | .40  | < .02 | .02  | .80  | < .30    | .70   |
| 18Mar98 | < .30 | < .50 | < .02 | < .10 | .26 | .10  | < .08 | .50  | < .02 | .06  | 1.10 | .50      | 1.20  |
| 30Mar98 | < .30 | < .50 | < .02 | < .10 | .25 | .10  | < .08 | .50  | < .02 | .04  | 1.00 | < .30    | .70   |
| 11Apr98 | < .30 | < .50 | < .02 | < .10 | .22 | .10  | < .08 | .30  | < .02 | .02  | .50  | < .30    | < .50 |
| 23Apr98 | < .30 | < .50 | < .02 | < .10 | .22 | .10  | < .08 | .20  | < .02 | .03  | .50  | < .30    | < .50 |
| 05May98 | < .30 | < .50 | < .02 | < .10 | .24 | .10  | < .08 | .30  | < .02 | .06  | .80  | < .30    | .80   |
| 17May98 | < .30 | < .50 | < .02 | < .10 | .23 | .10  | .09   | .30  | < .02 | .03  | .60  | < .30    | .90   |
| 29May98 | < .30 | < .50 | < .02 | < .10 | .23 | .10  | < .08 | .20  | < .02 | .03  | .60  | < .30    | .60   |
| 10Jun98 | < .30 | < .50 | < .02 | < .10 | .24 | .11  | < .08 | .20  | < .02 | .02  | .60  | < .30    | < .50 |
| 22Jun98 | < .30 | < .50 | < .02 | < .10 | .18 | .10  | < .08 | .10  | < .02 | .01  | .30  | < .30    | < .50 |
| 04Jul98 | < .30 | < .50 | < .02 | < .10 | .19 | .10  | < .08 | .20  | < .02 | .01  | .30  | < .30    | < .50 |
| 16Jul98 | < .30 | < .50 | < .02 | < .10 | .19 | .10  | < .08 | .30  | < .02 | .05  | 1.00 | .40      | .70   |
| 28Jul98 | < .30 | < .50 | < .02 | < .10 | .15 | .11  | < .08 | .20  | < .02 | .02  | .40  | < .30    | < .50 |
| 09Aug98 | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | .10  | < .02 | .02  | .40  | < .30    | < .50 |
| 21Aug98 | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | .30  | < .02 | .03  | .70  | < .30    | < .50 |
| 02Sep98 | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | .40  | < .02 | .06  | .90  | < .30    | .50   |
| 14Sep98 | < .30 | < .50 | < .02 | < .10 | .17 | .10  | < .08 | .10  | < .02 | .01  | .30  | < .30    | < .50 |
| 26Sep98 | < .30 | < .50 | < .02 | < .10 | .16 | .12  | .08   | .40  | < .02 | .04  | .90  | .40      | .90   |
| 08Oct98 | < .30 | < .50 | < .02 | < .10 | .16 | .10  | < .08 | .40  | < .02 | .04  | 1.20 | .50      | 1.20  |
| 20Oct98 | < .30 | 2.80  | .04   | < .10 | .16 | .11  | < .08 | .90  | < .02 | .13  | 2.50 | 1.00     | 2.10  |
| 01Nov98 | < .30 | < .50 | .02   | < .10 | .16 | .11  | < .08 | .70  | < .02 | .13  | 1.50 | .40      | 1.00  |
| 13Nov98 | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | .90  | < .02 | .09  | 2.30 | .60      | 1.60  |
| 25Nov98 | < .30 | < .50 | < .02 | < .10 | .13 | .09  | < .08 | .90  | < .02 | .10  | 1.80 | .60      | 1.20  |
| 07Dec98 | < .30 | 1.00  | < .02 | < .10 | .22 | .11  | < .08 | .90  | < .02 | .11  | 2.10 | .90      | 1.30  |
| 19Dec98 | < .30 | 2.00  | < .02 | < .10 | .19 | .11  | < .08 | .30  | < .02 | .03  | .70  | .30      | < .50 |
| 31Dec98 | < .30 | 2.60  | < .02 | < .10 | .17 | .11  | < .08 | .60  | < .02 | .09  | 1.70 | < .30    | 1.00  |

|          |       |       |       |       |     |     |       |     |       |     |      |       |       |
|----------|-------|-------|-------|-------|-----|-----|-------|-----|-------|-----|------|-------|-------|
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31  | 31    | 31  | 31    | 31  | 31   | 31    | 31    |
| # < LOD  | 31    | 27    | 29    | 31    |     |     | 25    |     | 31    |     |      | 17    | 10    |
| Max      | < .30 | 2.80  | < .08 | < .10 | .34 | .12 | .10   | .90 | < .02 | .15 | 2.50 | 1.00  | 2.10  |
| Min      | < .30 | < .50 | < .02 | < .10 | .13 | .09 | < .08 | .10 | < .02 | .01 | .30  | < .30 | < .50 |
| Mean*    | < .30 | .49   | .01   | < .10 | .20 | .10 | .05   | .43 | < .02 | .06 | 1.04 | .31   | .86   |
| Std dev* |       | .68   | .01   |       | .05 | .01 | .02   | .24 |       | .04 | .60  | .23   | .56   |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: San Rafael  
534 4th Street  
San Rafael, CA 94901

(P)

ID# 3005  
arb\_no 02100451  
al rs\_n06041000100

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98  | < .30 | .60   | < .02 | < .10 | .10 | .10  | < .08 | 1.00 | < .02 | 1.76 | 2.30 | .50      | 2.20  |
| 17Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .50  | < .02 | 1.13 | 1.30 | < .30    | 1.30  |
| 29Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .70  | < .02 | 1.18 | 1.50 | .60      | 1.80  |
| 10Feb98  | < .30 | .60   | < .02 | < .10 | .09 | .11  | < .08 | 1.20 | < .02 | 2.16 | 2.60 | .60      | 3.40  |
| 22Feb98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .50  | < .02 | .20  | .90  | < .30    | .90   |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .50  | < .02 | 3.15 | 1.10 | .40      | .90   |
| 18Mar98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .60  | < .02 | 2.10 | 1.50 | .40      | 1.20  |
| 30Mar98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .70  | < .02 | 1.88 | 1.60 | .30      | 1.10  |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .40  | < .02 | .07  | .70  | < .30    | < .50 |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .40  | < .02 | .46  | .90  | < .30    | .70   |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .60  | < .02 | 2.41 | 1.50 | < .30    | 1.20  |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .30  | < .02 | .08  | .70  | < .30    | 1.00  |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .40  | < .02 | .23  | .90  | < .30    | .80   |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .20  | < .02 | 2.20 | .70  | .30      | .50   |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .12 | .09  | < .08 | .30  | < .02 | .36  | .80  | < .30    | .50   |
| 04Jul 98 | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .20  | < .02 | .22  | .50  | < .30    | < .50 |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .11 | .10  | .10   | .40  | < .02 | 8.42 | 1.60 | .40      | 1.00  |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .10 | .09  | < .08 | .30  | < .02 | .26  | .60  | < .30    | < .50 |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .12 | .09  | < .08 | .20  | < .02 | .16  | .50  | < .30    | < .50 |
| 21Aug98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .40  | < .02 | .42  | 1.20 | < .30    | .80   |
| 02Sep98  | < .30 | < .50 | < .02 | < .10 | .09 | .09  | .12   | .40  | < .02 | 1.34 | 1.90 | .40      | .80   |
| 14Sep98  | < .30 | .50   | < .02 | < .10 | .17 | .10  | .08   | .50  | < .02 | .54  | 1.30 | < .30    | .80   |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .11  | < .08 | .50  | < .02 | .19  | 1.00 | .30      | .60   |
| 08Oct98  | < .30 | 1.50  | < .02 | < .10 | .06 | .10  | < .08 | .50  | < .02 | .53  | 1.30 | .30      | .80   |
| 20Oct98  | < .30 | .50   | < .02 | < .10 | .08 | .09  | < .08 | 1.00 | < .02 | .54  | 3.20 | .60      | 1.80  |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .50  | < .02 | .18  | 1.00 | .40      | .80   |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | 1.10 | < .02 | .72  | 2.50 | < .30    | 1.50  |
| 25Nov98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | 1.20 | < .02 | .50  | 3.10 | .50      | 1.20  |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | 1.10 | < .02 | .53  | 2.30 | < .30    | .70   |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .50  | < .02 | .22  | 1.10 | < .30    | < .50 |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .50  | < .02 | .14  | 1.20 | < .30    | < .50 |

|          |       |       |       |       |     |     |       |      |       |      |      |       |       |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|------|------|-------|-------|
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31  | 31    | 31   | 31    | 31   | 31   | 31    | 31    |
| # < LOD  | 31    | 26    | 31    | 31    | 31  | 31  | 28    | 31   | 31    | 31   | 31   | 17    | 6     |
| Max      | < .30 | 1.50  | < .02 | < .10 | .17 | .11 | .12   | 1.20 | < .02 | 8.42 | 3.20 | .60   | 3.40  |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09 | < .08 | .20  | < .02 | .07  | .50  | < .30 | < .50 |
| Mean*    | < .30 | .33   | < .30 | < .10 | .08 | .10 | .05   | .57  | < .02 | 1.11 | 1.40 | .28   | .96   |
| Std dev* |       | .24   |       |       | .03 | .01 | .02   | .29  |       | 1.60 | .74  | .16   | .67   |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: Ft. Cronkhl te Bldg 1049  
NATI ONL PRK SRVC  
Sausal ito, CA 94965

(P)

ID# 3007  
arb\_no 02100454  
al rs\_n06041000200

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ  | EDB   | PERC | TOL   | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|-------|-------|------|-------|----------|-------|
| 05Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .20   | < .02 | .01  | .40   | < .30    | < .50 |
| 17Jan98  | < .30 | < .50 | < .02 | < .10 | .19 | .11  | < .08 | .20   | < .02 | .02  | .30   | < .30    | < .50 |
| 29Jan98  | < .30 | < .50 | < .02 | < .10 | .18 | .11  | < .08 | .10   | < .02 | .02  | .20   | < .30    | < .50 |
| 10Feb98  | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | .20   | < .02 | .04  | .60   | < .30    | .60   |
| 22Feb98  | < .30 | < .50 | < .02 | < .10 | .15 | .10  | < .08 | .20   | < .02 | .05  | .50   | < .30    | < .50 |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .14 | .11  | < .08 | .10   | < .02 | .01  | .20   | < .30    | < .50 |
| 18Mar98  | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | .20   | < .02 | .03  | .40   | < .30    | < .50 |
| 30Mar98  | < .30 | < .50 | < .02 | < .10 | .47 | .10  | < .08 | .30   | < .02 | .06  | .90   | < .30    | 1.00  |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .10   | < .02 | .01  | .20   | < .30    | < .50 |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | .10   | < .02 | .01  | .20   | < .30    | < .50 |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .32 | .11  | < .08 | .10   | < .02 | .02  | .20   | < .30    | < .50 |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | .10   | < .02 | .01  | .20   | < .30    | < .50 |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .19 | .11  | < .08 | .10   | < .02 | .01  | .20   | < .30    | < .50 |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .16 | .10  | < .08 | < .10 | < .02 | .01  | < .10 | < .30    | < .50 |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .15 | .10  | < .08 | < .10 | < .02 | .01  | .10   | < .30    | < .50 |
| 04Jul 98 | < .30 | < .50 | < .02 | < .10 | .13 | .10  | < .08 | < .10 | < .02 | .01  | .10   | < .30    | < .50 |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .21 | .10  | < .08 | < .10 | < .02 | .02  | .10   | < .30    | < .50 |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .18 | .10  | < .08 | < .10 | < .02 | .01  | .10   | < .30    | < .50 |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .15 | .10  | < .08 | < .10 | < .02 | .01  | .10   | < .30    | < .50 |
| 21Aug98  | < .30 | < .50 | < .02 | < .10 | .33 | .10  | < .08 | .10   | < .02 | .03  | .20   | < .30    | < .50 |
| 02Sep98  | < .30 | < .50 | < .02 | < .10 | .19 | .11  | < .08 | < .10 | < .02 | .01  | .10   | < .30    | < .50 |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .21 | .11  | < .08 | < .10 | < .02 | .01  | < .10 | < .30    | < .50 |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .21 | .11  | < .08 | .30   | < .02 | .02  | .70   | < .30    | < .50 |
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .19 | .11  | < .08 | .10   | < .02 | .01  | .20   | < .30    | < .50 |
| 20Oct98  | < .30 | < .50 | < .02 | < .10 | .16 | .11  | < .08 | .30   | < .02 | .03  | .60   | .30      | .60   |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .16 | .10  | < .08 | .10   | < .02 | .01  | .20   | < .30    | < .50 |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .20   | < .02 | .04  | .60   | .30      | .70   |
| 25Nov98  | < .30 | < .50 | < .02 | < .10 | .18 | .12  | < .08 | .30   | < .02 | .04  | .60   | .30      | .50   |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .10 | .12  | < .08 | .20   | < .02 | .01  | .30   | < .30    | < .50 |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .15 | .11  | < .08 | < .10 | < .02 | .01  | .10   | < .30    | < .50 |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .32 | .11  | < .08 | .10   | < .02 | .01  | .20   | < .30    | < .50 |

|          |       |       |       |       |     |     |       |     |       |     |       |       |       |
|----------|-------|-------|-------|-------|-----|-----|-------|-----|-------|-----|-------|-------|-------|
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31  | 31    | 31  | 31    | 31  | 31    | 31    | 31    |
| # < LOD  | 31    | 31    | 31    | 31    | 31  | 31  | 31    | 9   | 31    | 2   | 28    | 26    | 26    |
| Max      | < .30 | < .50 | < .02 | < .10 | .47 | .12 | < .08 | .30 | < .02 | .06 | .90   | < .30 | 1.00  |
| Min      | < .30 | < .50 | < .02 | < .10 | .08 | .10 | < .08 | .10 | < .02 | .01 | < .10 | < .30 | < .50 |
| Mean*    | < .30 | < .50 | < .30 | < .10 | .18 | .11 | < .08 | .13 | < .02 | .02 | .29   | .16   | .32   |
| Std dev* |       |       |       |       | .08 | .01 |       | .09 |       | .01 | .22   | .05   | .18   |

\* i ncl udes Obs < LOD as 1/2 LOD

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
 TOXIC AIR CONTAMINANTS  
 1998 ANNUAL REPORT  
 DECEMBER 1999

Ambient Air Toxics Data – Gases (ppb)  
 Date Range: Jan 1, 1998 – Dec 31, 1998

Station: Napa - Jefferson St  
 2552 Jefferson St  
 Napa, CA 94558

(P)

ID# 4001  
 arb\_no 02800783  
 al rs\_n06055000300

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 06Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .70  | < .02 | .12  | 1.30 | .40      | 1.90  |
| 17Jan98  | < .30 | 1.50  | < .02 | < .10 | .14 | .09  | < .08 | .90  | < .02 | .05  | 2.00 | .70      | 2.10  |
| 30Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .70  | < .02 | .08  | 1.40 | < .30    | 2.10  |
| 10Feb98  | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | 1.00 | < .02 | .28  | 1.80 | .60      | 2.30  |
| 22Feb98  | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | .80  | < .02 | .08  | 1.40 | < .30    | 1.50  |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .11 | .09  | < .08 | .80  | < .02 | .06  | 1.50 | < .30    | 1.60  |
| 18Mar98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .80  | < .02 | .09  | 1.40 | < .30    | 1.90  |
| 30Mar98  | < .30 | < .50 | < .02 | < .10 | .12 | .09  | < .08 | .90  | < .02 | .08  | 1.50 | .40      | 1.70  |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .30  | < .02 | .04  | .50  | < .30    | < .50 |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .09 | .09  | < .08 | .40  | < .02 | .02  | .70  | < .30    | .80   |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .12 | .09  | < .08 | .60  | < .02 | .11  | 1.50 | .50      | 1.70  |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .30  | < .02 | .02  | .80  | < .30    | .90   |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .50  | < .02 | .03  | 1.30 | .30      | 1.30  |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .30  | < .02 | .02  | .70  | .30      | .80   |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .20  | < .02 | .01  | .50  | < .30    | < .50 |
| 04Jul 98 | < .30 | .80   | < .02 | < .10 | .12 | .10  | < .08 | .30  | < .02 | .02  | .50  | < .30    | .70   |
| 16Jul 98 | < .30 | .50   | < .02 | < .10 | .20 | .10  | < .08 | .70  | < .02 | .04  | 2.80 | .40      | 2.60  |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .09 | .09  | < .08 | .30  | < .02 | .02  | .80  | < .30    | .70   |
| 09Aug98  | < .30 | .80   | < .02 | < .10 | .10 | .09  | < .08 | .40  | < .02 | .03  | .70  | < .30    | .70   |
| 25Aug98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .30  | < .02 | .01  | .60  | < .30    | .50   |
| 02Sep98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .50  | < .02 | .04  | 1.40 | < .30    | 1.20  |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | .40  | < .02 | .06  | 1.10 | .40      | .90   |
| 29Sep98  | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | .30  | < .02 | .03  | .80  | .30      | 1.00  |
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .50  | < .02 | .04  | 1.80 | < .30    | 1.90  |
| 20Oct98  | < .30 | .60   | .05   | < .10 | .55 | .10  | < .08 | 1.40 | < .02 | .10  | 4.80 | .50      | 4.30  |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .09 | .09  | < .08 | .70  | < .02 | .02  | 1.30 | < .30    | 1.10  |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | 1.60 | < .02 | .07  | 3.30 | .50      | 3.00  |
| 25Nov98  | < .30 | .60   | .04   | < .10 | .15 | .10  | < .08 | 1.00 | < .02 | .07  | 2.20 | .30      | 2.10  |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .14 | .11  | < .08 | 1.30 | < .02 | .08  | 2.40 | .40      | 2.10  |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .11 | .09  | < .08 | 1.10 | < .02 | .07  | 2.10 | .50      | 1.70  |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .36 | .10  | < .08 | 1.10 | < .02 | .07  | 2.40 | .30      | 1.80  |

|          |       |       |       |       |     |     |       |      |       |     |      |       |       |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|-----|------|-------|-------|
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31  | 31    | 31   | 31    | 31  | 31   | 31    | 31    |
| # < LOD  | 31    | 25    | 29    | 31    |     |     | 31    |      | 31    |     |      | 15    | 2     |
| Max      | < .30 | 1.50  | .05   | < .10 | .55 | .11 | < .08 | 1.60 | < .02 | .28 | 4.80 | .70   | 4.30  |
| Min      | < .30 | < .50 | < .02 | < .10 | .06 | .09 | < .08 | .20  | < .02 | .01 | .50  | < .30 | < .50 |
| Mean*    | < .30 | .36   | .01   | < .10 | .13 | .09 | < .08 | .68  | < .02 | .06 | 1.53 | .29   | 1.53  |
| Std dev* |       | .27   | .01   |       | .10 | .01 |       | .37  |       | .05 | .93  | .16   | .86   |

\* includes Obs < LOD as 1/2 LOD



**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: San Francisco - Arkansas St. (P)  
10 Arkansas Street  
San Francisco, CA 94107

ID# 5011  
arb\_no 09000306  
alrs\_n06075000500

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98  | < .30 | .60   | < .02 | < .10 | .09 | .10  | < .08 | 1.00 | < .02 | .08  | 2.70 | .50      | 2.40  |
| 17Jan98  | < .30 | .80   | < .02 | < .10 | .14 | .10  | < .08 | .70  | < .02 | .08  | 2.10 | .60      | 2.30  |
| 29Jan98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .90  | < .02 | .08  | 1.80 | .40      | 1.80  |
| 10Feb98  | < .30 | 1.20  | < .02 | < .10 | .11 | .10  | < .08 | .80  | < .02 | .10  | 1.90 | .60      | 1.60  |
| 10Feb98  | < .30 | 1.10  | < .02 | < .10 | .09 | .10  | < .08 | .80  | < .02 | .08  | 1.90 | .60      | 1.70  |
| 22Feb98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .90  | < .02 | .06  | 1.80 | < .30    | 2.20  |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .60  | < .02 | .06  | 1.80 | < .30    | 1.30  |
| 18Mar98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .70  | < .02 | .11  | 1.80 | .40      | 1.60  |
| 30Mar98  | < .30 | .80   | < .02 | < .10 | .12 | .10  | < .08 | .80  | < .02 | .06  | 1.90 | .30      | 1.90  |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .20  | < .02 | .03  | .50  | < .30    | < .50 |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .30  | < .02 | .03  | .60  | < .30    | .50   |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .40  | < .02 | .20  | 1.30 | .30      | .90   |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .30  | < .02 | .03  | .70  | < .30    | .60   |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .07 | .11  | < .08 | .40  | < .02 | .04  | 1.50 | < .30    | < .50 |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .40  | < .02 | .03  | .90  | < .30    | .70   |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .30  | < .02 | .48  | 1.10 | < .30    | .70   |
| 04Jul 98 | < .30 | < .50 | < .02 | < .10 | .05 | .11  | < .08 | .20  | < .02 | .02  | .50  | < .30    | < .50 |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .80  | < .02 | 1.04 | 2.40 | .40      | 1.40  |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .20  | < .02 | .04  | .70  | < .30    | < .50 |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .30  | < .02 | .02  | .50  | < .30    | < .50 |
| 21Aug98  | < .30 | .70   | < .02 | < .10 | .09 | .10  | < .08 | .40  | < .02 | .09  | 2.10 | .40      | .60   |
| 02Sep98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .70  | < .02 | .11  | 2.80 | .30      | 1.10  |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .10 | .09  | < .08 | .30  | < .02 | .93  | 1.10 | .30      | .50   |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .40  | < .02 | .05  | 1.00 | .40      | .70   |
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .08 | .11  | < .08 | .40  | < .02 | .07  | 1.50 | .50      | 1.10  |
| 20Oct98  | < .30 | < .50 | .08   | < .10 | .13 | .09  | < .08 | 2.00 | < .02 | .23  | 7.40 | .70      | 5.10  |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .70  | < .02 | .04  | 1.70 | .30      | 1.20  |
| 13Nov98  | < .30 | .50   | < .02 | < .10 | .08 | .10  | < .08 | 1.50 | < .02 | .19  | 5.00 | .30      | 2.80  |
| 25Nov98  | < .30 | .80   | .06   | < .10 | .13 | .10  | < .08 | 1.50 | < .02 | .24  | 5.50 | .30      | 2.60  |
| 07Dec98  | < .30 | .80   | .05   | < .10 | .26 | .11  | .08   | 1.00 | < .02 | .08  | 2.60 | .40      | 1.90  |
| 19Dec98  | < .30 | .90   | < .02 | < .10 | .09 | .11  | < .08 | .30  | < .02 | .03  | .70  | .50      | .50   |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .09 | .12  | < .08 | 1.00 | < .02 | .10  | 2.90 | .40      | 2.60  |

|          |       |       |       |       |     |     |       |      |       |      |      |       |       |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|------|------|-------|-------|
| # OBS    | 32    | 32    | 32    | 32    | 32  | 32  | 32    | 32   | 32    | 32   | 32   | 32    | 32    |
| # < LOD  | 32    | 22    | 29    | 32    |     |     | 31    |      | 32    |      |      | 11    | 5     |
| Max      | < .30 | 1.20  | .08   | < .10 | .26 | .12 | < .08 | 2.00 | < .02 | 1.04 | 7.40 | .70   | 5.10  |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09 | < .08 | .20  | < .02 | .02  | .50  | < .30 | < .50 |
| Mean*    | < .30 | .43   | .02   | < .10 | .09 | .10 | .04   | .66  | < .02 | .15  | 1.96 | .33   | 1.36  |
| Std dev* |       | .29   | .02   |       | .04 | .01 | .01   | .42  |       | .24  | 1.52 | .16   | 1.05  |

\* Includes Obs < LOD as 1/2 LOD

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
 TOXIC AIR CONTAMINANTS  
 1998 ANNUAL REPORT  
 DECEMBER 1999

Ambient Air Toxics Data – Gases (ppb)  
 Date Range: Jan 1, 1998 – Dec 31, 1998

Station: San Francisco - Arkansas St.  
 10 Arkansas Street  
 San Francisco, CA 94107

ID# 5011  
 arb\_no 09000306  
 al rs\_n06075000500

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98  | < .30 | .60   | < .02 | < .10 | .09 | .11  | < .08 | .80  | < .02 | .07  | 2.90 | .50      | 2.40  |
| 17Jan98  | < .30 | .80   | < .02 | < .10 | .13 | .10  | < .08 | .60  | < .02 | .08  | 2.10 | .70      | 2.20  |
| 29Jan98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .80  | < .02 | .07  | 1.90 | .40      | 1.70  |
| 22Feb98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | 1.00 | < .02 | .07  | 1.90 | < .30    | 2.20  |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .60  | < .02 | .05  | 1.80 | < .30    | 1.20  |
| 30Mar98  | < .30 | .80   | < .02 | < .10 | .09 | .10  | < .08 | .60  | < .02 | .08  | 1.70 | .30      | 1.70  |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .30  | < .02 | .03  | .60  | < .30    | < .50 |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .40  | < .02 | .05  | .80  | < .30    | .50   |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .40  | < .02 | .20  | 1.50 | .30      | 1.00  |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .40  | < .02 | .04  | .60  | < .30    | .70   |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .30  | < .02 | .03  | 1.30 | < .30    | < .50 |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .40  | < .02 | .04  | 1.00 | < .30    | .60   |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .50  | < .02 | .48  | 1.00 | < .30    | .80   |
| 04Jul 98 | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .20  | < .02 | .02  | .50  | < .30    | < .50 |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .80  | < .02 | 1.04 | 2.20 | .40      | 1.40  |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .20  | < .02 | .03  | .70  | < .30    | < .50 |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .20  | < .02 | .02  | .50  | < .30    | < .50 |
| 21Aug98  | < .30 | .80   | < .02 | < .10 | .09 | .10  | < .08 | .40  | < .02 | .09  | 1.90 | .40      | .60   |
| 02Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .80  | < .02 | .11  | 3.10 | .30      | 1.10  |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .30  | < .02 | .96  | 1.20 | .30      | .60   |
| 26Sep98  | < .30 | < .50 | < .02 | < .10 | .07 | .11  | < .08 | .40  | < .02 | .04  | .90  | .40      | .70   |
| 07Oct98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .40  | < .02 | .08  | 1.50 | .60      | 1.20  |
| 20Oct98  | < .30 | < .50 | .09   | < .10 | .13 | .09  | < .08 | 2.00 | < .02 | .22  | 7.40 | .70      | 5.20  |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .70  | < .02 | .04  | 1.70 | .30      | 1.20  |
| 13Nov98  | < .30 | .50   | < .02 | < .10 | .10 | .11  | < .08 | 1.50 | < .02 | .24  | 4.80 | .30      | 2.40  |
| 25Nov98  | < .30 | .80   | .06   | < .10 | .13 | .10  | < .08 | 1.30 | < .02 | .21  | 4.90 | .40      | 2.80  |
| 07Dec98  | < .30 | .80   | .05   | < .10 | .26 | .11  | .08   | 1.00 | < .02 | .08  | 2.50 | .30      | 1.70  |
| 19Dec98  | < .30 | .90   | < .02 | < .10 | .10 | .12  | < .08 | .40  | < .02 | .03  | .80  | .40      | .60   |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .09 | .12  | < .08 | 1.00 | < .02 | .09  | 2.90 | .40      | 2.50  |

|          |       |       |       |       |     |     |       |      |       |      |      |       |       |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|------|------|-------|-------|
| # OBS    | 29    | 29    | 29    | 29    | 29  | 29  | 29    | 29   | 29    | 29   | 29   | 29    | 29    |
| # < LOD  | 29    | 21    | 26    | 29    |     |     | 28    |      | 29    |      |      | 11    | 5     |
| Max      | < .30 | .90   | .09   | < .10 | .26 | .12 | < .08 | 2.00 | < .02 | 1.04 | 7.40 | .70   | 5.20  |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09 | < .08 | .20  | < .02 | .02  | .50  | < .30 | < .50 |
| Mean*    | < .30 | .39   | .02   | < .10 | .09 | .10 | .04   | .64  | < .02 | .16  | 1.95 | .31   | 1.32  |
| Std dev* |       | .24   | .02   |       | .04 | .01 | .01   | .42  |       | .25  | 1.54 | .17   | 1.08  |

\* Includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: Redwood Cl ty  
897 Barron Avenue  
Redwood Cl ty, CA 94063

(P)

ID# 6004  
arb\_no 04100541  
al rs\_n06081100100

| Date    | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|---------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98 | < .30 | 2.20  | .03   | < .10 | .22 | .10  | .21   | 1.80 | < .02 | .19  | 5.60 | .80      | 5.60  |
| 17Jan98 | < .30 | .80   | .04   | < .10 | .25 | .10  | .11   | 1.20 | < .02 | .10  | 3.70 | .70      | 4.40  |
| 29Jan98 | < .30 | 2.20  | < .02 | < .10 | .22 | .10  | < .08 | .80  | < .02 | .08  | 5.30 | .60      | 3.10  |
| 10Feb98 | < .30 | 2.60  | .03   | < .10 | .12 | .10  | .08   | 1.00 | < .02 | .10  | 3.50 | .60      | 2.70  |
| 22Feb98 | < .30 | 13.10 | .05   | < .10 | .18 | .10  | .10   | .80  | < .02 | .19  | 5.60 | .50      | 2.50  |
| 06Mar98 | < .30 | < .50 | < .02 | < .10 | .18 | .10  | < .08 | .70  | < .02 | .06  | 2.50 | .50      | 2.10  |
| 18Mar98 | < .30 | .90   | < .02 | < .10 | .17 | .10  | .10   | .70  | < .02 | .24  | 1.80 | .50      | 2.00  |
| 30Mar98 | < .30 | 1.10  | < .02 | < .10 | .12 | .10  | .11   | .70  | < .02 | .08  | 2.40 | < .30    | 2.00  |
| 11Apr98 | < .30 | 3.90  | < .02 | < .10 | .27 | .10  | < .08 | .40  | < .02 | .03  | .90  | < .30    | .90   |
| 23Apr98 | < .30 | .60   | < .02 | < .10 | .16 | .10  | < .08 | .30  | < .02 | .02  | 1.20 | .40      | .80   |
| 05May98 | < .30 | .80   | < .02 | < .10 | .22 | .11  | < .08 | .50  | < .02 | .07  | 2.90 | .50      | 1.60  |
| 17May98 | < .30 | < .50 | < .02 | < .10 | .20 | .10  | < .08 | .40  | < .02 | .10  | .90  | < .30    | .80   |
| 29May98 | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | .40  | < .02 | .17  | 2.90 | .30      | .90   |
| 10Jun98 | < .30 | .50   | < .02 | < .10 | .33 | .11  | < .08 | .20  | < .02 | .03  | 1.20 | < .30    | .60   |
| 22Jun98 | < .30 | 1.50  | .06   | < .10 | .13 | .10  | < .08 | .60  | < .02 | .03  | 3.90 | .40      | 2.90  |
| 04Jul98 | < .30 | < .50 | < .02 | < .10 | .14 | .10  | < .08 | .30  | < .02 | .02  | .80  | < .30    | .50   |
| 16Jul98 | < .30 | 1.20  | < .02 | < .10 | .22 | .10  | .11   | .70  | < .02 | .16  | 2.50 | .40      | 1.80  |
| 28Jul98 | < .30 | < .50 | < .02 | < .10 | .44 | .10  | < .08 | .30  | < .02 | .04  | 1.00 | .50      | .60   |
| 09Aug98 | < .30 | < .50 | < .02 | < .10 | .17 | .10  | < .08 | .30  | < .02 | .02  | .80  | .30      | < .50 |
| 21Aug98 | < .30 | < .50 | < .02 | < .10 | .17 | .10  | .16   | .50  | < .02 | .14  | 1.80 | .40      | 1.50  |
| 02Sep98 | < .30 | 1.00  | < .02 | < .10 | .22 | .10  | < .08 | .60  | < .02 | .13  | 2.00 | < .30    | 1.20  |
| 14Sep98 | < .30 | .70   | < .02 | < .10 | .20 | .10  | < .08 | .40  | < .02 | .10  | 1.60 | .30      | 1.20  |
| 26Sep98 | < .30 | < .50 | < .02 | < .10 | .25 | .10  | < .08 | .40  | < .02 | .05  | 1.00 | < .30    | .80   |
| 08Oct98 | < .30 | < .50 | .16   | < .10 | .23 | .10  | < .08 | 1.50 | < .02 | .05  | 4.40 | .80      | 3.40  |
| 20Oct98 | < .30 | .90   | .07   | < .10 | .23 | .10  | .17   | 1.50 | < .02 | .65  | 5.60 | .80      | 4.90  |
| 01Nov98 | < .30 | .60   | < .02 | < .10 | .25 | .11  | < .08 | .60  | < .02 | .06  | 1.60 | .30      | 1.10  |
| 13Nov98 | < .30 | .90   | < .02 | < .10 | .18 | .10  | .27   | 2.20 | < .02 | .50  | 5.90 | .80      | 4.80  |
| 25Nov98 | < .30 | 2.60  | < .02 | < .10 | .44 | .10  | .27   | 1.40 | < .02 | .29  | 3.90 | .70      | 3.20  |
| 07Dec98 | < .30 | 3.20  | < .02 | < .10 | .20 | .10  | .31   | 1.90 | < .02 | .17  | 4.30 | 1.00     | 3.20  |
| 19Dec98 | < .30 | < .50 | < .02 | < .10 | .14 | .11  | .10   | .50  | < .02 | .05  | 1.30 | < .30    | < .50 |
| 31Dec98 | < .30 | .90   | < .02 | < .10 | .20 | .10  | .21   | 1.20 | < .02 | .10  | 2.50 | .90      | 1.80  |

|          |       |       |       |       |     |     |       |      |       |     |      |       |      |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|-----|------|-------|------|
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31  | 31    | 31   | 31    | 31  | 31   | 31    | 31   |
| # < LOD  | 31    | 10    | 24    | 31    |     |     | 17    |      | 31    |     |      | 8     | 2    |
| Max      | < .30 | 13.10 | .16   | < .10 | .44 | .11 | .31   | 2.20 | < .02 | .65 | 5.90 | 1.00  | 5.60 |
| Min      | < .30 | < .50 | < .02 | < .10 | .12 | .10 | < .08 | .20  | < .02 | .02 | .80  | < .30 | .50  |
| Mean*    | < .30 | 1.44  | .02   | < .10 | .21 | .10 | .10   | .80  | < .02 | .13 | 2.75 | .46   | 2.05 |
| Std dev* |       | 2.37  | .03   |       | .08 | .00 | .08   | .53  |       | .14 | 1.66 | .26   | 1.46 |

\* includes Obs < LOD as 1/2 LOD

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
 TOXIC AIR CONTAMINANTS  
 1998 ANNUAL REPORT  
 DECEMBER 1999

Ambient Air Toxics Data – Gases (ppb)  
 Date Range: Jan 1, 1998 – Dec 31, 1998

Station: San Jose - 4th St  
 120B N 4th Street  
 San Jose, CA 95112

(P)

ID# 7009  
 arb\_no 04300382  
 al rs\_n06085000400

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|------|
| 05Jan98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | 1.50 | < .02 | .08  | 4.10 | .70      | 4.00 |
| 17Jan98  | < .30 | < .50 | < .02 | < .10 | .12 | .11  | < .08 | .80  | < .02 | .07  | 2.30 | .60      | 3.00 |
| 29Jan98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .90  | < .02 | .05  | 1.90 | .40      | 2.10 |
| 10Feb98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .70  | < .02 | .04  | 1.40 | .40      | 1.70 |
| 22Feb98  | < .30 | 1.00  | < .02 | < .10 | .12 | .10  | < .08 | .80  | < .02 | .05  | 1.50 | .50      | 1.60 |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .70  | < .02 | .04  | 1.80 | < .30    | 1.40 |
| 18Mar98  | < .30 | .50   | < .02 | < .10 | .10 | .09  | < .08 | .90  | < .02 | .08  | 2.20 | .50      | 2.10 |
| 30Mar98  | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .70  | < .02 | .04  | 1.70 | .30      | 1.50 |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .08 | .11  | < .08 | .40  | < .02 | .03  | .90  | < .30    | .60  |
| 23Apr98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .40  | < .02 | .02  | .90  | .30      | .70  |
| 05May98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .50  | < .02 | .08  | 1.70 | < .30    | 1.50 |
| 17May98  | < .30 | .80   | < .02 | < .10 | .10 | .10  | < .08 | .40  | < .02 | .05  | 1.20 | .40      | 1.10 |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .40  | < .02 | .02  | 1.10 | .30      | 1.10 |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .07 | .09  | < .08 | .40  | < .02 | .02  | 1.00 | < .30    | .70  |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .20  | < .02 | .03  | .60  | < .30    | .50  |
| 04Jul 98 | < .30 | < .50 | < .02 | < .10 | .10 | .10  | < .08 | .10  | < .02 | .02  | .60  | < .30    | .60  |
| 16Jul 98 | < .30 | .80   | < .02 | < .10 | .12 | .10  | < .08 | 1.00 | < .02 | .11  | 3.00 | .50      | 3.20 |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | .20  | < .02 | .03  | 1.10 | < .30    | .80  |
| 09Aug98  | < .30 | 1.00  | < .02 | < .10 | .07 | .09  | < .08 | .40  | < .02 | .02  | 1.10 | < .30    | .90  |
| 21Aug98  | < .30 | < .50 | < .02 | < .10 | .13 | .11  | < .08 | .80  | < .02 | .11  | 2.50 | < .30    | 2.40 |
| 02Sep98  | < .30 | .50   | < .02 | < .10 | .10 | .10  | < .08 | .70  | < .02 | .07  | 2.40 | .30      | 1.90 |
| 14Sep98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .50  | < .02 | .05  | 1.60 | .30      | 1.50 |
| 26Sep98  | < .30 | .70   | < .02 | < .10 | .09 | .11  | < .08 | .40  | < .02 | .03  | .70  | < .30    | .50  |
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .09 | .11  | < .08 | 1.00 | < .02 | .06  | 2.10 | .40      | 1.80 |
| 20Oct98  | < .30 | 1.30  | < .02 | < .10 | .16 | .10  | < .08 | 2.70 | < .02 | .37  | 7.50 | 1.00     | 7.40 |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .09 | .11  | < .08 | 1.30 | < .02 | .07  | 3.30 | .60      | 2.70 |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | 2.80 | < .02 | .50  | 7.40 | .90      | 7.20 |
| 25Nov98  | < .30 | < .50 | < .02 | < .10 | .13 | .10  | < .08 | 2.10 | < .02 | .22  | 4.80 | .90      | 4.80 |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | 1.80 | < .02 | .13  | 4.00 | .90      | 3.00 |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .07 | .11  | < .08 | .70  | < .02 | .06  | 1.70 | < .30    | 1.00 |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | 1.20 | < .02 | .11  | 2.80 | .80      | 2.00 |

|          |       |       |       |       |     |     |       |      |       |     |      |       |      |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|-----|------|-------|------|
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31  | 31    | 31   | 31    | 31  | 31   | 31    | 31   |
| # < LOD  | 31    | 23    | 31    | 31    |     |     | 31    |      | 31    |     |      | 11    |      |
| Max      | < .30 | 1.30  | < .02 | < .10 | .16 | .11 | < .08 | 2.80 | < .02 | .50 | 7.50 | 1.00  | 7.40 |
| Min      | < .30 | < .50 | < .02 | < .10 | .07 | .09 | < .08 | .10  | < .02 | .02 | .60  | < .30 | .50  |
| Mean*    | < .30 | .40   | < .30 | < .10 | .10 | .10 | < .08 | .88  | < .02 | .09 | 2.29 | .41   | 2.11 |
| Std dev* |       | .29   |       |       | .02 | .01 |       | .67  |       | .10 | 1.73 | .27   | 1.73 |

\* includes Obs < LOD as 1/2 LOD

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
 TOXIC AIR CONTAMINANTS  
 1998 ANNUAL REPORT  
 DECEMBER 1999

Ambient Air Toxics Data – Gases (ppb)  
 Date Range: Jan 1, 1998 – Dec 31, 1998

Station: Mt View - Cuesta (P)  
 160 Cuesta Drive  
 Mountain View, CA 94040

ID# 7013  
 arb\_no 04300387  
 al rs\_n06085100200

| Date    | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|---------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 06Jan98 | < .30 | .60   | < .02 | < .10 | .39 | .10  | < .08 | 1.00 | < .02 | .03  | 2.30 | .60      | 2.60  |
| 17Jan98 | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .80  | < .02 | .06  | 1.80 | .60      | 2.20  |
| 29Jan98 | < .30 | < .50 | < .02 | < .10 | .07 | .11  | < .08 | .50  | < .02 | .05  | 1.00 | < .30    | 1.00  |
| 10Feb98 | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .60  | < .02 | .04  | 1.00 | .40      | 1.10  |
| 22Feb98 | < .30 | < .50 | < .02 | < .10 | .10 | .11  | < .08 | .60  | < .02 | .04  | 1.10 | .50      | .90   |
| 06Mar98 | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | .60  | < .02 | .03  | 1.00 | < .30    | 1.00  |
| 18Mar98 | < .30 | < .50 | < .02 | < .10 | .12 | .10  | < .08 | .60  | < .02 | .07  | 1.10 | < .30    | 1.10  |
| 30Mar98 | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .50  | < .02 | .03  | .90  | .30      | .70   |
| 11Apr98 | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .20  | < .02 | .01  | .30  | < .30    | < .50 |
| 23Apr98 | < .30 | < .50 | < .02 | < .10 | .18 | .10  | < .08 | .50  | < .02 | .07  | 1.00 | < .30    | .80   |
| 05May98 | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .60  | < .02 | .12  | 1.20 | < .30    | 1.00  |
| 17May98 | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .10  | < .02 | .01  | .30  | < .30    | < .50 |
| 29May98 | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .40  | < .02 | .04  | .70  | < .30    | .60   |
| 10Jun98 | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .30  | < .02 | .06  | 1.10 | .30      | .60   |
| 22Jun98 | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .30  | < .02 | .03  | .80  | < .30    | .60   |
| 04Jul98 | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .30  | < .02 | .02  | .60  | < .30    | < .50 |
| 16Jul98 | < .30 | .50   | < .02 | < .10 | .11 | .09  | < .08 | .50  | < .02 | .07  | 2.00 | .50      | 1.50  |
| 28Jul98 | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .30  | < .02 | .04  | .80  | .30      | .80   |
| 09Aug98 | < .30 | < .50 | < .02 | < .10 | .09 | .11  | < .08 | .20  | < .02 | .03  | .60  | .30      | .50   |
| 21Aug98 | < .30 | .60   | .04   | < .10 | .07 | .10  | < .08 | .40  | < .02 | .04  | 1.10 | < .30    | .80   |
| 02Sep98 | < .30 | < .50 | < .02 | < .10 | .12 | .09  | < .08 | .70  | < .02 | .10  | 1.70 | .40      | 1.80  |
| 14Sep98 | < .30 | < .50 | < .02 | < .10 | .17 | .10  | < .08 | .50  | < .02 | .03  | 1.20 | .50      | .90   |
| 26Sep98 | < .30 | .60   | < .02 | < .10 | .15 | .11  | < .08 | .60  | < .02 | .03  | 1.30 | .30      | 1.40  |
| 08Oct98 | < .30 | .80   | .06   | < .10 | .14 | .10  | < .08 | 2.00 | < .02 | .10  | 4.80 | .80      | 4.80  |
| 20Oct98 | < .30 | < .50 | .06   | < .10 | .10 | .10  | < .08 | 1.50 | < .02 | .10  | 3.80 | .60      | 3.50  |
| 01Nov98 | < .30 | .70   | < .02 | < .10 | .08 | .11  | < .08 | .50  | < .02 | .08  | 1.70 | .50      | 1.40  |
| 13Nov98 | < .30 | < .50 | < .02 | < .10 | .08 | .11  | < .08 | 1.50 | < .02 | .05  | 3.40 | .30      | 2.60  |
| 25Nov98 | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | 1.20 | < .02 | .10  | 2.40 | < .30    | 1.90  |
| 07Dec98 | < .30 | < .50 | < .02 | < .10 | .11 | .10  | < .08 | 1.40 | < .02 | .10  | 2.80 | .60      | 2.00  |
| 19Dec98 | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .20  | < .02 | .03  | .40  | < .30    | < .50 |
| 31Dec98 | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .80  | < .02 | .05  | 1.50 | < .30    | .80   |

|          |       |       |       |       |     |     |       |      |       |     |      |       |       |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|-----|------|-------|-------|
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31  | 31    | 31   | 31    | 31  | 31   | 31    | 31    |
| # < LOD  | 31    | 25    | 28    | 31    |     |     | 30    |      | 31    |     |      | 14    | 4     |
| Max      | < .30 | .80   | .06   | < .10 | .39 | .11 | < .08 | 2.00 | < .02 | .12 | 4.80 | .80   | 4.80  |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09 | < .08 | .10  | < .02 | .01 | .30  | < .30 | < .50 |
| Mean*    | < .30 | .32   | .01   | < .10 | .10 | .10 | .04   | .65  | < .02 | .05 | 1.47 | .32   | 1.29  |
| Std dev* |       | .16   | .01   |       | .06 | .01 | .01   | .45  |       | .03 | 1.05 | .19   | 1.02  |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: Val l e j o - Tuol umne St  
304 Tuol umne Street  
Val l e j o, CA 94590

(P)

ID# 8004  
arb\_no 04800879  
al rs\_n06095000400

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE  |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|-------|
| 05Jan98  | < .30 | 1.10  | < .02 | < .10 | .14 | .10  | < .08 | 2.00 | < .02 | .07  | 3.90 | 1.00     | 5.10  |
| 17Jan98  | < .30 | 1.30  | < .02 | < .10 | .13 | .10  | < .08 | 1.00 | < .02 | .12  | 2.90 | .60      | 3.80  |
| 30Jan98  | < .30 | .90   | < .02 | < .10 | .18 | .10  | < .08 | 1.30 | < .02 | .07  | 2.90 | .70      | 3.50  |
| 10Feb98  | < .30 | < .50 | < .02 | < .10 | .09 | .11  | < .08 | 1.20 | < .02 | .09  | 2.20 | .70      | 3.20  |
| 22Feb98  | < .30 | .70   | < .02 | < .10 | .10 | .10  | < .08 | 1.20 | < .02 | .07  | 2.20 | .60      | 2.80  |
| 06Mar98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | 1.10 | < .02 | .09  | 2.30 | .50      | 2.40  |
| 18Mar98  | < .30 | .70   | < .02 | < .10 | .10 | .09  | < .08 | .70  | < .02 | .11  | 1.90 | .40      | 2.30  |
| 30Mar98  | < .30 | .70   | < .02 | < .10 | .08 | .10  | < .08 | .90  | < .02 | .03  | 1.90 | < .30    | 2.50  |
| 11Apr98  | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .30  | < .02 | .05  | .50  | < .30    | .50   |
| 23Apr98  | < .30 | .60   | < .02 | < .10 | .05 | .10  | < .08 | .20  | < .02 | .05  | .50  | < .30    | .60   |
| 05May98  | < .30 | 1.70  | < .02 | < .10 | .07 | .10  | < .08 | .30  | < .02 | .06  | 1.40 | < .30    | 1.00  |
| 17May98  | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .20  | < .02 | .02  | .60  | < .30    | .80   |
| 29May98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .30  | < .02 | .05  | .70  | < .30    | .80   |
| 10Jun98  | < .30 | < .50 | < .02 | < .10 | .05 | .10  | < .08 | .30  | < .02 | .21  | .50  | < .30    | .60   |
| 22Jun98  | < .30 | < .50 | < .02 | < .10 | .06 | .10  | < .08 | .20  | < .02 | .26  | .40  | < .30    | < .50 |
| 04Jul 98 | < .30 | .50   | < .02 | < .10 | .11 | .09  | < .08 | .20  | < .02 | .02  | .50  | < .30    | .50   |
| 16Jul 98 | < .30 | < .50 | < .02 | < .10 | .09 | .10  | < .08 | .50  | < .02 | .21  | 1.20 | .30      | 1.20  |
| 28Jul 98 | < .30 | < .50 | < .02 | < .10 | .07 | .10  | < .08 | .20  | < .02 | .32  | .40  | < .30    | < .50 |
| 09Aug98  | < .30 | < .50 | < .02 | < .10 | .05 | .09  | < .08 | .20  | < .02 | .04  | .60  | < .30    | < .50 |
| 21Aug98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | .30  | < .02 | .24  | .90  | .30      | .70   |
| 02Sep98  | < .30 | 1.20  | .05   | < .10 | .38 | .10  | < .08 | .40  | < .02 | .09  | 1.40 | < .30    | .70   |
| 14Sep98  | < .30 | .60   | < .02 | < .10 | .14 | .10  | < .08 | .20  | < .02 | .40  | .80  | .30      | .70   |
| 26Sep98  | < .30 | .80   | < .02 | < .10 | .11 | .11  | < .08 | .50  | < .02 | .31  | 1.10 | .40      | 1.20  |
| 08Oct98  | < .30 | .60   | < .02 | < .10 | .06 | .10  | < .08 | .40  | < .02 | .10  | .80  | .30      | .50   |
| 20Oct98  | < .30 | < .50 | .04   | < .10 | .14 | .11  | < .08 | 1.80 | < .02 | .10  | 6.50 | .70      | 5.60  |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .06 | .09  | < .08 | .70  | < .02 | .03  | 2.20 | .40      | 1.70  |
| 13Nov98  | < .30 | 1.20  | < .02 | < .10 | .32 | .11  | < .08 | 1.70 | < .02 | .11  | 4.50 | .60      | 4.00  |
| 25Nov98  | < .30 | < .50 | < .02 | < .10 | .10 | .09  | < .08 | 2.20 | < .02 | .18  | 5.60 | .40      | 4.60  |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .08 | .10  | < .08 | 2.10 | < .02 | .15  | 4.50 | 1.20     | 2.60  |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .09 | .11  | < .08 | .20  | < .02 | .04  | .60  | < .30    | < .50 |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .08 | .09  | < .08 | 1.40 | < .02 | .11  | 3.10 | .30      | 1.50  |

|          |       |       |       |       |     |     |       |      |       |     |      |       |      |
|----------|-------|-------|-------|-------|-----|-----|-------|------|-------|-----|------|-------|------|
| # OBS    | 31    | 31    | 31    | 31    | 31  | 31  | 31    | 31   | 31    | 31  | 31   | 31    | 31   |
| # < LOD  | 31    | 17    | 29    | 31    |     |     | 31    |      | 31    |     |      | 13    | 4    |
| Max      | < .30 | 1.70  | .05   | < .10 | .38 | .11 | < .08 | 2.20 | < .02 | .40 | 6.50 | 1.20  | 5.60 |
| Min      | < .30 | < .50 | < .02 | < .10 | .05 | .09 | < .08 | .20  | < .02 | .02 | .40  | < .30 | .50  |
| Mean*    | < .30 | .54   | .01   | < .10 | .11 | .10 | < .08 | .78  | < .02 | .12 | 1.92 | .38   | 1.82 |
| Std dev* |       | .40   | .01   |       | .07 | .01 |       | .65  |       | .10 | 1.63 | .27   | 1.57 |

\* i ncl udes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data – Gases (ppb)  
Date Range: Jan 1, 1998 – Dec 31, 1998**

Station: Santa Rosa - 5th St  
837 5th Street  
Santa Rosa, CA 95404

(P)

ID# 9004  
arb\_no 04900893  
al rs\_n06097000300

| Date     | VC    | DCM   | CHC13 | EDC   | TCA | CC14 | TCE   | BENZ | EDB   | PERC | TOL  | BUT-1, 3 | MTBE |
|----------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|----------|------|
| 08Oct98  | < .30 | < .50 | < .02 | < .10 | .79 | .10  | < .08 | .40  | < .02 | .02  | 1.50 | .30      | .70  |
| 20Oct98  | < .30 | < .50 | < .02 | < .10 | .23 | .09  | < .08 | 1.30 | < .02 | .08  | 4.10 | .50      | 2.80 |
| 01Nov98  | < .30 | < .50 | < .02 | < .10 | .31 | .10  | .15   | .70  | < .02 | .07  | 1.40 | .40      | .80  |
| 13Nov98  | < .30 | < .50 | < .02 | < .10 | .20 | .10  | < .08 | 1.10 | < .02 | .13  | 3.90 | < .30    | 2.20 |
| 25Nov98  | < .30 | < .50 | < .02 | < .10 | .33 | .10  | < .08 | 1.00 | < .02 | .04  | 2.00 | < .30    | 1.00 |
| 07Dec98  | < .30 | < .50 | < .02 | < .10 | .19 | .10  | < .08 | 1.30 | < .02 | .08  | 2.30 | < .30    | 1.30 |
| 19Dec98  | < .30 | < .50 | < .02 | < .10 | .18 | .10  | < .08 | 1.00 | < .02 | .07  | 1.90 | .50      | .80  |
| 31Dec98  | < .30 | < .50 | < .02 | < .10 | .17 | .09  | < .08 | .90  | < .02 | .03  | 1.60 | .30      | .60  |
| # OBS    | 8     | 8     | 8     | 8     | 8   | 8    | 8     | 8    | 8     | 8    | 8    | 8        | 8    |
| # < LOD  | 8     | 8     | 8     | 8     | 8   | 8    | 7     | 8    | 8     | 8    | 8    | 3        | 8    |
| Max      | < .30 | < .50 | < .02 | < .10 | .79 | .10  | .15   | 1.30 | < .02 | .13  | 4.10 | .50      | 2.80 |
| Min      | < .30 | < .50 | < .02 | < .10 | .17 | .09  | < .08 | .40  | < .02 | .02  | 1.40 | .30      | .60  |
| Mean*    | < .30 | < .50 | < .30 | < .10 | .30 | .10  | .05   | .96  | < .02 | .06  | 2.34 | .31      | 1.28 |
| Std dev* |       |       |       |       | .21 | .00  | .04   | .30  |       | .04  | 1.07 | .15      | .80  |

\* Includes Obs < LOD as 1/2 LOD

**APPENDIX C-2**

**AMBIENT AIR MONITORING  
DATA SUMMARY BY POLLUTANT**



**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**DIRECTORY OF TOXIC AIR CONTAMINANT  
MONITORING STATIONS**

| <b><u>Station</u></b> | <b><u>Location</u></b>  | <b><u>Address</u></b>             |
|-----------------------|-------------------------|-----------------------------------|
| 1014                  | Fremont                 | 40733 Chapel Way                  |
| 1017                  | Livermore               | 2614 Old First Street             |
| 1018                  | Oakland – Davie Stadium | 198 Oak Road                      |
| 1022                  | San Leandro             | 15400 Foothill Blvd.              |
| 2011                  | Richmond                | 1144 13 <sup>th</sup> Street      |
| 2018                  | Concord                 | 2975 Treat Blvd.                  |
| 2019                  | Richmond                | 1065 7 <sup>th</sup> Street       |
| 2021                  | Bethel Island           | 5551 Bethel Island Road           |
| 2024                  | Antioch                 | 1201 W. 10 <sup>th</sup> Street   |
| 2030                  | San Pablo               | Unit 759, El Portal Center        |
| 3005                  | San Rafael              | 534 4 <sup>th</sup> Street        |
| 3007                  | Fort Cronkhite          | Building 1049                     |
| 4001                  | Napa                    | 2552 Jefferson Street             |
| 5011                  | San Francisco           | 10 Arkansas Street                |
| 6004                  | Redwood City            | 897 Barron Avenue                 |
| 7009                  | San Jose                | 120B North 4 <sup>th</sup> Street |
| 7013                  | Mountain View           | 160 Cuesta Drive                  |
| 8004                  | Vallejo                 | 304 Tuolumne Street               |
| 9004                  | Santa Rosa              | 837 5 <sup>th</sup> Street        |



**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

Ambient Air Toxics Data - Perchloroethylene (PERC) (ppb)  
Date Range: Jan 01, 1998 - Dec 31, 1998

| Months    | 1014 | 1017 | 1018 | 1022 | 2011 | 2018 | 2019 | 2021 | 2024 | 2030 | 3005 | 3007 | 4001 | 5011 | 5011 | 6004 | 7009 | 7013 | 8004 | 9004 |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Jan05 98  | .05  | .10  | .09  | .03  |      | .05  | .05  |      | .01  | .03  | 1.76 | .01  |      | .08  | .07  | .19  | .08  |      | .07  |      |
| Jan06 98  |      |      |      |      |      |      |      |      |      |      |      |      | .12  |      |      |      |      | .03  |      |      |
| Jan17 98  | .09  | .18  | .05  | .05  |      | .18  | .04  |      | .12  | .13  | 1.13 | .02  | .05  | .08  | .08  | .10  | .07  | .06  | .12  |      |
| Jan29 98  | .05  | .28  | .04  | .05  |      | .03  | .05  |      | .03  | .10  | 1.18 | .02  |      | .08  | .07  | .08  | .05  | .05  |      |      |
| Jan30 98  |      |      |      |      |      |      |      |      |      |      |      |      | .08  |      |      |      |      |      |      | .07  |
| Feb10 98  |      | .20  |      | .04  |      | .07  | .06  |      |      | .15  | 2.16 | .04  | .28  | .08  |      | .10  | .04  | .04  | .09  |      |
| Feb12 98  | .17  |      | .04  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Feb22 98  |      | .04  | .04  | .03  |      | .07  | .04  |      | .05  | .06  | .20  | .05  | .08  | .06  | .07  | .19  | .05  | .04  | .07  |      |
| Feb25 98  | .25  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Mar06 98  | .06  | .23  | .03  | .04  |      | .08  | .02  |      | .04  | .02  | 3.15 | .01  | .06  | .06  | .05  | .06  | .04  | .03  | .09  |      |
| Mar18 98  | .09  | .10  | .12  | .10  |      | .06  | .05  |      | .21  | .06  | 2.10 | .03  | .09  | .11  |      | .24  | .08  | .07  | .11  |      |
| Mar30 98  | .07  | .14  | .05  | .03  |      | .03  | .03  | .02  |      | .04  | 1.88 | .06  | .08  | .06  | .08  | .08  | .04  | .03  | .03  |      |
| Apr11 98  | .05  | .04  | .02  | .05  |      | .02  | .01  | .01  |      | .02  | .07  | .01  | .04  | .03  | .03  | .03  | .03  | .01  | .05  |      |
| Apr23 98  | .03  | .06  | .02  | .02  |      | .02  | .01  | .01  |      | .03  | .46  | .01  | .02  | .03  | .05  | .02  | .02  | .07  | .05  |      |
| May05 98  | .05  | .10  |      | .08  |      | .08  | .02  | .17  |      | .06  | 2.41 | .02  | .11  | .20  | .20  | .07  | .08  | .12  | .06  |      |
| May11 98  |      |      | .07  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| May17 98  | .02  | .02  | .02  | .02  |      | .02  |      | .02  |      | .03  | .08  | .01  | .02  | .03  | .04  | .10  | .05  | .01  | .02  |      |
| May29 98  | .08  | .09  | .07  | .02  |      | .04  | .02  | .02  |      | .03  | .23  | .01  | .03  | .04  | .03  | .17  | .02  | .04  | .05  |      |
| Jun10 98  | .05  | .17  | .07  | .03  |      | .02  | .02  | .01  |      | .02  | 2.20 | .01  | .02  | .03  | .04  | .03  | .02  | .06  | .21  |      |
| Jun22 98  | .03  | .26  | .05  | .02  |      | .02  | .02  | .02  |      | .01  | .36  | .01  | .01  | .48  | .48  | .03  | .03  | .03  | .26  |      |
| Jul 04 98 | .03  | .03  | .03  | .02  |      | .01  | .01  | .01  |      | .01  | .22  | .01  | .02  | .02  | .02  | .02  | .02  | .02  | .02  |      |
| Jul 16 98 | .10  | .18  | .16  | .09  |      | .06  | .02  | .02  |      | .05  | 8.42 | .02  | .04  | 1.04 | 1.04 | .16  | .11  | .07  | .21  |      |
| Jul 28 98 | .03  | .31  | .03  | .02  |      | .03  | .01  | .03  |      | .02  | .26  | .01  | .02  | .04  | .03  | .04  | .03  | .04  | .32  |      |
| Aug09 98  | .03  | .04  | .03  | .02  |      | .02  | .01  | .02  |      | .02  | .16  | .01  | .03  | .02  | .02  | .02  | .02  | .03  | .04  |      |
| Aug21 98  | .07  | .12  | .06  | .07  |      | .04  | .03  | .02  |      | .03  | .42  | .03  |      | .09  | .09  | .14  | .11  | .04  | .24  |      |
| Aug25 98  |      |      |      |      |      |      |      |      |      |      |      |      | .01  |      |      |      |      |      |      |      |
| Sep02 98  | .12  | .31  | .08  | .16  |      | .09  |      | .02  |      | .06  | 1.34 | .01  | .04  | .11  | .11  | .13  | .07  | .10  | .09  |      |
| Sep03 98  |      |      |      |      |      |      | .04  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Sep14 98  | .10  | .11  | .04  | .09  |      | .05  | .02  | .02  |      | .01  | .54  | .01  | .06  | .93  | .96  | .10  | .05  | .03  | .40  |      |
| Sep26 98  | .05  | .08  | .04  | .02  |      | .03  | .03  | .01  |      | .04  | .19  | .02  |      | .05  | .04  | .05  | .03  | .03  | .31  |      |
| Sep29 98  |      |      |      |      |      |      |      |      |      |      |      |      | .03  |      |      |      |      |      |      |      |
| Oct07 98  |      |      |      |      |      |      |      |      |      |      |      |      |      |      | .08  |      |      |      |      |      |
| Oct08 98  | .08  | .38  | .03  | .05  |      | .04  | .02  | .02  |      | .04  | .53  | .01  | .04  | .07  |      | .05  | .06  | .10  | .10  | .02  |
| Oct20 98  | .26  | .19  | .11  | .02  |      | .12  | .10  | .05  |      | .13  | .54  | .03  | .10  | .23  | .22  | .65  | .37  | .10  | .10  | .08  |
| Nov01 98  | .07  | .09  | .05  | .02  |      | .04  | .02  | .01  |      | .13  | .18  | .01  | .02  | .04  | .04  | .06  | .07  | .08  | .03  | .07  |
| Nov13 98  | .07  | .24  | .05  | .06  |      | .07  | .09  | .03  |      | .09  | .72  | .04  | .07  | .19  | .24  | .50  | .50  | .05  | .11  | .13  |
| Nov25 98  | .12  | .17  | .07  | .06  |      | .09  | .10  | .04  |      | .10  | .50  | .04  | .07  | .24  | .21  | .29  | .22  | .10  | .18  | .04  |
| Dec07 98  | .15  | .12  | .10  | .07  |      | .09  | .10  | .02  |      | .11  | .53  | .01  | .08  | .08  | .08  | .17  | .13  | .10  | .15  | .08  |
| Dec19 98  | .04  | .08  | .03  | .03  |      | .03  | .03  | .02  |      | .03  | .22  | .01  | .07  | .03  | .03  | .05  | .06  | .03  | .04  | .07  |
| Dec31 98  | .08  | .18  | .07  |      |      | .05  | .03  | .04  |      | .09  | .14  | .01  | .07  | .10  | .09  | .10  | .11  | .05  | .11  | .03  |
| # OBS     | 31   | 31   | 31   | 30   | 0    | 31   | 30   | 24   | 6    | 31   | 31   | 31   | 31   | 32   | 29   | 31   | 31   | 31   | 31   | 8    |
| #<LOD     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Max       | .26  | .38  | .16  | .16  |      | .18  | .10  | .17  | .21  | .15  | 8.42 | .06  | .28  | 1.04 | 1.04 | .65  | .50  | .12  | .40  | .13  |
| Min       | .02  | .02  | .02  | .02  |      | .01  | .01  | .01  | .01  | .01  | .07  | .01  | .01  | .02  | .02  | .02  | .02  | .01  | .02  | .02  |
| mean*     | .08  | .15  | .06  | .05  |      | .05  | .04  | .03  | .08  | .06  | 1.11 | .02  | .06  | .15  | .16  | .13  | .09  | .05  | .12  | .06  |
| sdev*     | .06  | .09  | .03  | .03  |      | .04  | .03  | .03  | .08  | .04  | 1.60 | .01  | .05  | .24  | .25  | .14  | .10  | .03  | .10  | .04  |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

Ambient Air Toxics Data - Toluene (ppb)  
Date Range: Jan 01, 1998 - Dec 31, 1998

| Months   | 1014 | 1017 | 1018 | 1022 | 2011 | 2018 | 2019 | 2021 | 2024 | 2030 | 3005 | 3007  | 4001 | 5011 | 5011 | 6004 | 7009 | 7013 | 8004 | 9004 |  |
|----------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|--|
| Jan05 98 | 2.00 | 5.50 | 3.70 | 1.10 |      | 5.60 | 1.60 |      | 3.30 | 1.20 | 2.30 | .40   |      | 2.70 | 2.90 | 5.60 | 4.10 |      | 3.90 |      |  |
| Jan06 98 |      |      |      |      |      |      |      |      |      |      |      |       | 1.30 |      |      |      |      | 2.30 |      |      |  |
| Jan17 98 | 2.50 | 3.20 | 1.20 | 1.30 |      | 3.20 | 1.80 |      | 1.60 | 1.60 | 1.30 | .30   | 2.00 | 2.10 | 2.10 | 3.70 | 2.30 | 1.80 | 2.90 |      |  |
| Jan29 98 | 1.70 | 1.40 | .90  | .70  |      | 1.30 | 2.40 |      | 1.10 | 1.20 | 1.50 | .20   |      | 1.80 | 1.90 | 5.30 | 1.90 | 1.00 |      |      |  |
| Jan30 98 |      |      |      |      |      |      |      |      |      |      |      |       | 1.40 |      |      |      |      |      |      | 2.90 |  |
| Feb10 98 |      | 2.80 |      | .80  |      | 2.40 | 1.60 |      |      | 1.60 | 2.60 | .60   | 1.80 | 1.90 |      | 3.50 | 1.40 | 1.00 |      | 2.20 |  |
| Feb12 98 | 1.50 |      | .90  |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |  |
| Feb22 98 |      | 1.80 | .70  | .70  |      | 1.30 | 1.50 |      | 1.20 | 1.10 | .90  | .50   | 1.40 | 1.80 | 1.90 | 5.60 | 1.50 | 1.10 |      | 2.20 |  |
| Feb25 98 | 1.90 |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |  |
| Mar06 98 | 1.60 | 1.20 | 1.00 | .60  |      | 1.40 | 1.10 |      | .08  | .80  | 1.10 | .20   | 1.50 | 1.80 | 1.80 | 2.50 | 1.80 | 1.00 |      | 2.30 |  |
| Mar18 98 | 2.30 | 2.10 | 1.30 | 1.40 |      | 1.90 | 1.80 |      | 1.90 | 1.10 | 1.50 | .40   | 1.40 | 1.80 |      | 1.80 | 2.20 | 1.10 | 1.90 |      |  |
| Mar30 98 | 1.70 | 1.30 | 1.00 | .80  |      | 1.50 | 7.60 | .70  |      | 1.00 | 1.60 | .90   | 1.50 | 1.90 | 1.70 | 2.40 | 1.70 | .90  | 1.90 |      |  |
| Apr11 98 | .60  | .60  | .20  | .40  |      | .80  | .50  | .50  |      | .50  | .70  | .20   | .50  | .50  | .60  | .90  | .90  | .30  | .50  |      |  |
| Apr23 98 | .50  | .90  | .40  | .50  |      | .90  | 2.30 | .30  |      | .50  | .90  | .20   | .70  | .60  | .80  | 1.20 | .90  | 1.00 | .50  |      |  |
| May05 98 | 2.50 | 2.60 |      | .50  |      | 1.80 | 2.00 | .60  |      | .80  | 1.50 | .20   | 1.50 | 1.30 | 1.50 | 2.90 | 1.70 | 1.20 | 1.40 |      |  |
| May11 98 |      |      | .50  |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |  |
| May17 98 | .70  | .80  | 1.00 | .40  |      | .80  |      | .30  |      | .60  | .70  | .20   | .80  | .70  | .60  | .90  | 1.20 | .30  | .60  |      |  |
| May29 98 | 1.70 | .70  | .70  | .50  |      | 1.10 | 3.60 | .50  |      | .60  | .90  | .20   | 1.30 | 1.50 | 1.30 | 2.90 | 1.10 | .70  | .70  |      |  |
| Jun10 98 | .60  | .60  | .60  | .50  |      | 1.10 | 1.80 | .40  |      | .60  | .70  | < .10 | .70  | .90  | 1.00 | 1.20 | 1.00 | 1.10 | .50  |      |  |
| Jun22 98 | .50  | 1.00 | .40  | .40  |      | 1.20 | 1.10 | .50  |      | .30  | .80  | .10   | .50  | 1.10 | 1.00 | 3.90 | .60  | .80  | .40  |      |  |
| Jul04 98 | .60  | .70  | .60  | .50  |      | 1.20 | .30  | .40  |      | .30  | .50  | .10   | .50  | .50  | .50  | .80  | .60  | .60  | .50  |      |  |
| Jul16 98 | 2.70 | 2.10 | 1.80 | 2.10 |      | 1.80 | .80  | .90  |      | 1.00 | 1.60 | .10   | 2.80 | 2.40 | 2.20 | 2.50 | 3.00 | 2.00 | 1.20 |      |  |
| Jul28 98 | .70  | .70  | .50  | .40  |      | 1.40 | .90  | .50  |      | .40  | .60  | .10   | .80  | .70  | .70  | 1.00 | 1.10 | .80  | .40  |      |  |
| Aug09 98 | 1.10 | .70  | .60  | .50  |      | 1.30 | .30  | .50  |      | .40  | .50  | .10   | .70  | .50  | .50  | .80  | 1.10 | .60  | .60  |      |  |
| Aug21 98 | 1.00 | 1.20 | 1.00 | 1.10 |      | 1.50 | 1.10 | .80  |      | .70  | 1.20 | .20   |      | 2.10 | 1.90 | 1.80 | 2.50 | 1.10 | .90  |      |  |
| Aug25 98 |      |      |      |      |      |      |      |      |      |      |      |       | .60  |      |      |      |      |      |      |      |  |
| Sep02 98 | 2.80 | 2.50 | 1.60 | 2.70 |      | 2.50 |      | .70  |      | .90  | 1.90 | .10   | 1.40 | 2.80 | 3.10 | 2.00 | 2.40 | 1.70 | 1.40 |      |  |
| Sep03 98 |      |      |      |      |      |      | 1.50 |      |      |      |      |       |      |      |      |      |      |      |      |      |  |
| Sep14 98 | 2.90 | 1.90 | .50  | 1.30 |      | 2.30 | .40  | .60  |      | .30  | 1.30 | < .10 | 1.10 | 1.10 | 1.20 | 1.60 | 1.60 | 1.20 | .80  |      |  |
| Sep26 98 | 1.50 | .90  | .70  | .40  |      | 1.70 | 2.10 | .40  |      | .90  | 1.00 | .70   |      | 1.00 | .90  | 1.00 | .70  | 1.30 | 1.10 |      |  |
| Sep29 98 |      |      |      |      |      |      |      |      |      |      |      |       | .80  |      |      |      |      |      |      |      |  |
| Oct07 98 |      |      |      |      |      |      |      |      |      |      |      |       |      | 1.50 |      |      |      |      |      |      |  |
| Oct08 98 | 1.80 | .90  | 1.00 | 1.20 |      | 1.40 | 1.50 | .60  |      | 1.20 | 1.30 | .20   | 1.80 | 1.50 |      | 4.40 | 2.10 | 4.80 | .80  | 1.50 |  |
| Oct20 98 | 4.20 | 3.10 | 2.70 | 1.40 |      | 4.40 | 4.20 | 1.80 |      | 2.50 | 3.20 | .60   | 4.80 | 7.40 | 7.40 | 5.60 | 7.50 | 3.80 | 6.50 | 4.10 |  |
| Nov01 98 | 2.50 | 1.70 | 1.30 | 1.30 |      | 2.20 | 1.90 | 1.10 |      | 1.50 | 1.00 | .20   | 1.30 | 1.70 | 1.70 | 1.60 | 3.30 | 1.70 | 2.20 | 1.40 |  |
| Nov13 98 | 2.00 | 3.20 | 1.40 | 1.00 |      | 3.00 | 2.60 | 2.20 |      | 2.30 | 2.50 | .60   | 3.30 | 5.00 | 4.80 | 5.90 | 7.40 | 3.40 | 4.50 | 3.90 |  |
| Nov25 98 | 3.40 | 3.20 | 1.30 | 1.00 |      | 2.60 | 3.00 | 1.20 |      | 1.80 | 3.10 | .60   | 2.20 | 5.50 | 4.90 | 3.90 | 4.80 | 2.40 | 5.60 | 2.00 |  |
| Dec07 98 | 2.70 | 3.30 | 1.60 | 1.80 |      | 3.50 | 4.10 | .90  |      | 2.10 | 2.30 | .30   | 2.40 | 2.60 | 2.50 | 4.30 | 4.00 | 2.80 | 4.50 | 2.30 |  |
| Dec19 98 | 2.30 | 1.20 | .40  | .60  |      | 1.20 | 1.10 | .40  |      | .70  | 1.10 | .10   | 2.10 | .70  | .80  | 1.30 | 1.70 | .40  | .60  | 1.90 |  |
| Dec31 98 | 2.30 | 1.40 | 1.30 |      |      | 1.50 | 2.00 | 1.10 |      | 1.70 | 1.20 | .20   | 2.40 | 2.90 | 2.90 | 2.50 | 2.80 | 1.50 | 3.10 | 1.60 |  |

|       |      |      |      |      |   |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|---|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|
| # OBS | 31   | 31   | 31   | 30   | 0 | 31   | 30   | 24   | 6    | 31   | 31   | 31    | 31   | 32   | 29   | 31   | 31   | 31   | 31   | 8    |
| #<LOD | 0    | 0    | 0    | 0    | 0 | 0    | 0    | 0    | 0    | 0    | 0    | 2     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Max   | 4.20 | 5.50 | 3.70 | 2.70 |   | 5.60 | 7.60 | 2.20 | 3.30 | 2.50 | 3.20 | .90   | 4.80 | 7.40 | 7.40 | 5.90 | 7.50 | 4.80 | 6.50 | 4.10 |
| Min   | .50  | .60  | .20  | .40  |   | .80  | .30  | .30  | .08  | .30  | .50  | < .10 | .50  | .50  | .50  | .80  | .60  | .30  | .40  | 1.40 |
| mean* | 1.83 | 1.78 | 1.06 | .93  |   | 1.93 | 1.95 | .75  | 1.53 | 1.04 | 1.40 | .29   | 1.53 | 1.96 | 1.95 | 2.75 | 2.29 | 1.47 | 1.92 | 2.34 |
| sdev* | .93  | 1.14 | .71  | .56  |   | 1.08 | 1.47 | .47  | 1.06 | .60  | .74  | .22   | .93  | 1.52 | 1.54 | 1.66 | 1.73 | 1.05 | 1.63 | 1.07 |

\* includes Obs < LOD as 1/2 LOD

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
 TOXIC AIR CONTAMINANTS  
 1998 ANNUAL REPORT  
 DECEMBER 1999

Ambient Air Toxics Data - 1,1,1-trichloroethane (with dioxane) (ppb)  
 Date Range: Jan 01, 1998 - Dec 31, 1998

| Months    | 1014 | 1017 | 1018 | 1022 | 2011 | 2018 | 2019 | 2021 | 2024 | 2030 | 3005 | 3007 | 4001 | 5011 | 5011 | 6004 | 7009 | 7013 | 8004 | 9004 |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Jan05 98  | .08  | .24  | .08  | .07  |      | .15  | .08  |      | .13  | .29  | .10  | .08  |      | .09  | .09  | .22  | .12  |      | .14  |      |
| Jan06 98  |      |      |      |      |      |      |      |      |      |      |      |      | .08  |      |      |      |      | .39  |      |      |
| Jan17 98  | .11  | .16  | .12  | .10  |      | .12  | .08  |      | .11  | .34  | .08  | .19  | .14  | .14  | .13  | .25  | .12  | .08  | .13  |      |
| Jan29 98  | .07  | .09  | .13  | .08  |      | .11  | .07  |      | .07  | .21  | .08  | .18  |      | .06  | .08  | .22  | .07  | .07  |      |      |
| Jan30 98  |      |      |      |      |      |      |      |      |      |      |      |      | .08  |      |      |      |      |      |      | .18  |
| Feb10 98  |      | .27  |      | .10  |      | .31  | .08  |      |      | .28  | .09  | .11  | .14  | .11  |      | .12  | .09  | .07  | .09  |      |
| Feb12 98  | .07  |      | .11  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Feb22 98  |      | .10  | .20  | .07  |      | .21  | .07  |      | .09  | .28  | .06  | .15  | .14  | .09  | .12  | .18  | .12  | .10  | .10  |      |
| Feb25 98  | .13  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Mar06 98  | .07  | .11  | .06  | .07  |      | .19  | .08  |      | .10  | .24  | .06  | .14  | .11  | .12  | .09  | .18  | .09  | .08  | .07  |      |
| Mar18 98  | .08  | .17  | .07  | .09  |      | .30  | .08  |      | .07  | .26  | .08  | .14  | .08  | .09  | .17  | .10  | .12  | .10  | .10  |      |
| Mar30 98  | .07  | .13  | .08  | .06  |      | .08  | .07  | .05  |      | .25  | .12  | .47  | .12  | .12  | .09  | .12  | .10  | .06  | .08  |      |
| Apr11 98  | .06  | .11  | .06  | .08  |      | .07  | .08  | .08  |      | .22  | .08  | .12  | .07  | .05  | .07  | .27  | .08  | .06  | .09  |      |
| Apr23 98  | .06  | .09  | .05  | .06  |      | .11  | .06  | .10  |      | .22  | .06  | .11  | .09  | .06  | .08  | .16  | .07  | .18  | .05  |      |
| May05 98  | .13  | .16  |      | .09  |      | .11  | .07  | .11  |      | .24  | .12  | .32  | .12  | .06  | .08  | .22  | .12  | .07  | .07  |      |
| May11 98  |      |      | .11  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| May17 98  | .07  | .13  | .08  | .08  |      | .06  |      | .09  |      | .23  | .06  | .14  | .07  | .08  | .09  | .20  | .10  | .06  | .07  |      |
| May29 98  | .09  | .12  | .09  | .15  |      | .05  | .07  | .05  |      | .23  | .06  | .19  | .10  | .07  | .06  | .14  | .07  | .05  | .05  |      |
| Jun10 98  | .10  | .13  | .13  | .06  |      | .06  | .05  | .11  |      | .24  | .06  | .16  | .06  | .09  | .08  | .33  | .07  | .06  | .05  |      |
| Jun22 98  | .05  | .13  | .07  | .06  |      | .05  | .06  | .09  |      | .18  | .12  | .15  | .06  | .07  | .06  | .13  | .07  | .09  | .06  |      |
| Jul 04 98 | .08  | .14  | .08  | .06  |      | .07  | .06  | .05  |      | .19  | .06  | .13  | .12  | .05  | .05  | .14  | .10  | .05  | .11  |      |
| Jul 16 98 | .12  | .15  | .18  | .12  |      | .09  | .07  | .12  |      | .19  | .11  | .21  | .20  | .10  | .09  | .22  | .12  | .11  | .09  |      |
| Jul 28 98 | .12  | .16  | .06  | .08  |      | .10  | .08  | .08  |      | .15  | .10  | .18  | .09  | .06  | .05  | .44  | .11  | .08  | .07  |      |
| Aug09 98  | .08  | .27  | .11  | .08  |      | .08  | .08  | .09  |      | .14  | .12  | .15  | .10  | .05  | .05  | .17  | .07  | .09  | .05  |      |
| Aug21 98  | .12  | .11  | .14  | .07  |      | .07  | .07  | .14  |      | .14  | .08  | .33  |      | .09  | .09  | .17  | .13  | .07  | .08  |      |
| Aug25 98  |      |      |      |      |      |      |      |      |      |      |      |      | .07  |      |      |      |      |      |      |      |
| Sep02 98  | .15  | .16  | .07  | .12  |      | .08  |      | .07  |      | .14  | .09  | .19  | .08  | .08  | .07  | .22  | .10  | .12  | .38  |      |
| Sep03 98  |      |      |      |      |      |      | .11  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Sep14 98  | .12  | .15  | .10  | .08  |      | .09  | .07  | .07  |      | .17  | .17  | .21  | .11  | .10  | .10  | .20  | .12  | .17  | .14  |      |
| Sep26 98  | .10  | .15  | .07  | .07  |      | .10  | .08  | .07  |      | .16  | .07  | .21  |      | .07  | .07  | .25  | .09  | .15  | .11  |      |
| Sep29 98  |      |      |      |      |      |      |      |      |      |      |      |      | .11  |      |      |      |      |      |      |      |
| Oct07 98  |      |      |      |      |      |      |      |      |      |      |      |      |      | .08  |      |      |      |      |      |      |
| Oct08 98  | .15  | .16  | .08  | .09  |      | .06  | .08  | .05  |      | .16  | .06  | .19  | .07  | .08  |      | .23  | .09  | .14  | .06  | .79  |
| Oct20 98  | .20  | .46  | .08  | .08  |      | .11  | .10  | .06  |      | .16  | .08  | .16  | .55  | .13  | .13  | .23  | .16  | .10  | .14  | .23  |
| Nov01 98  | .10  | .23  | .06  | .06  |      | .11  | .07  | .07  |      | .16  | .06  | .16  | .09  | .07  | .07  | .25  | .09  | .08  | .06  | .31  |
| Nov13 98  | .07  | 2.29 | .08  | .08  |      | .07  | .10  | .08  |      | .14  | .06  | .12  | .10  | .08  | .10  | .18  | .12  | .08  | .32  | .20  |
| Nov25 98  | .09  | .38  | .06  | .09  |      | .06  | .08  | .11  |      | .13  | .07  | .18  | .15  | .13  | .13  | .44  | .13  | .06  | .10  | .33  |
| Dec07 98  | .09  | .19  | .06  | .11  |      | .09  | .10  | .10  |      | .22  | .06  | .10  | .14  | .26  | .26  | .20  | .08  | .11  | .08  | .19  |
| Dec19 98  | .05  | .15  | .09  | .10  |      | .05  | .05  | .09  |      | .19  | .05  | .15  | .11  | .09  | .10  | .14  | .07  | .05  | .09  | .18  |
| Dec31 98  | .11  | .16  | .10  |      |      | .12  | .08  | .08  |      | .17  | .05  | .32  | .36  | .09  | .09  | .20  | .08  | .07  | .08  | .17  |
| # OBS     | 31   | 31   | 31   | 30   | 0    | 31   | 30   | 24   | 6    | 31   | 31   | 31   | 31   | 32   | 29   | 31   | 31   | 31   | 31   | 8    |
| #<LOD     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Max       | .20  | 2.29 | .20  | .15  |      | .31  | .11  | .14  | .13  | .34  | .17  | .47  | .55  | .26  | .26  | .44  | .16  | .39  | .38  | .79  |
| Min       | .05  | .09  | .05  | .06  |      | .05  | .05  | .05  | .07  | .13  | .05  | .08  | .06  | .05  | .05  | .12  | .07  | .05  | .05  | .17  |
| mean*     | .10  | .24  | .09  | .08  |      | .11  | .08  | .08  | .09  | .20  | .08  | .18  | .13  | .09  | .09  | .21  | .10  | .10  | .11  | .30  |
| sdev*     | .03  | .39  | .04  | .02  |      | .06  | .01  | .02  | .02  | .05  | .03  | .08  | .10  | .04  | .04  | .08  | .02  | .06  | .07  | .21  |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

Ambient Air Toxics Data - Tri chloroethylene (ppb)  
Date Range: Jan 01, 1998 - Dec 31, 1998

| Months    | 1014  | 1017  | 1018  | 1022  | 2011 | 2018  | 2019  | 2021  | 2024  | 2030  | 3005  | 3007  | 4001  | 5011  | 5011  | 6004  | 7009  | 7013  | 8004  | 9004  |  |
|-----------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Jan05 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 |       | < .08 | < .08 | .21   | < .08 |       | < .08 |       |  |
| Jan06 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .08 |       |       |       |       | < .08 |       | < .08 |  |
| Jan17 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 |       | < .08 | .10   | < .08 | < .08 | < .08 | < .08 | < .08 | .11   | < .08 | < .08 | < .08 | < .08 |  |
| Jan29 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 |       | < .08 | .08   | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |       |  |
| Jan30 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .08 |       |       |       |       |       |       | < .08 |  |
| Feb10 98  |       | < .08 |       | < .08 |      | < .08 | < .08 |       |       | .09   | < .08 | < .08 | < .08 | < .08 |       | .08   | < .08 | < .08 | < .08 | < .08 |  |
| Feb12 98  | < .08 |       | < .08 |       |      | < .08 | < .08 |       |       |       | < .08 | < .08 | < .08 | < .08 | < .08 | .10   | < .08 | < .08 | < .08 | < .08 |  |
| Feb22 98  |       | .22   | < .08 | < .08 |      | < .08 | < .08 |       | < .08 | .08   | < .08 | < .08 | < .08 | < .08 | < .08 | .10   | < .08 | < .08 | < .08 | < .08 |  |
| Feb25 98  | < .08 |       |       |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Mar06 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Mar18 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .10   | < .08 | < .08 | < .08 | < .08 |  |
| Mar30 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .11   | < .08 | < .08 | < .08 | < .08 |  |
| Apr11 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Apr23 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| May05 98  | < .08 | < .08 |       | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| May11 98  |       |       | < .08 |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| May17 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 |       | < .08 |       | .09   | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| May29 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Jun10 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Jun22 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Jul 04 98 | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Jul 16 98 | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | .10   | < .08 | < .08 | < .08 | < .08 | .11   | < .08 | < .08 | < .08 | < .08 |  |
| Jul 28 98 | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Aug09 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Aug21 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .16   | < .08 | < .08 | < .08 | < .08 |  |
| Aug25 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .08 |       |       |       |       |       |       |       |  |
| Sep02 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 |       | < .08 |       | < .08 | .12   | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Sep03 98  |       |       |       |       |      |       | < .08 |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Sep14 98  | .11   | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | .08   | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Sep26 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | .08   | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |  |
| Sep29 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .08 |       |       |       |       |       |       |       |  |
| Oct07 98  |       |       |       |       |      |       |       |       |       |       |       |       |       | < .08 |       |       |       |       |       |       |  |
| Oct08 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .08   | < .08 | < .08 |  |
| Oct20 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .17   | < .08 | < .08 | < .08 | < .08 |  |
| Nov01 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .15   |  |
| Nov13 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .27   | < .08 | < .08 | < .08 | < .08 |  |
| Nov25 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .27   | < .08 | < .08 | < .08 | < .08 |  |
| Dec07 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | .08   | .08   | .31   | < .08 | < .08 | < .08 | < .08 |  |
| Dec19 98  | < .08 | < .08 | < .08 | < .08 |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .10   | < .08 | < .08 | < .08 | < .08 |  |
| Dec31 98  | < .08 | < .08 | < .08 |       |      | < .08 | < .08 | < .08 |       | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | .21   | < .08 | < .08 | < .08 | < .08 |  |

|       |       |       |       |       |   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| # OBS | 31    | 31    | 31    | 30    | 0 | 31    | 30    | 24    | 6     | 31    | 31    | 31    | 31    | 32    | 29    | 31    | 31    | 31    | 31    | 8     |
| #<LOD | 30    | 30    | 31    | 30    | 0 | 31    | 30    | 24    | 6     | 25    | 28    | 31    | 31    | 31    | 28    | 17    | 31    | 30    | 31    | 7     |
| Max   | .11   | .22   | < .08 | < .08 |   | < .08 | < .08 | < .08 | < .08 | .10   | .12   | < .08 | < .08 | < .08 | < .08 | .31   | < .08 | < .08 | < .08 | .15   |
| Min   | < .08 | < .08 | < .08 | < .08 |   | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 | < .08 |
| mean* | .04   | .05   | < .08 | < .08 |   | < .08 | < .08 | < .08 | < .08 | .05   | .05   | < .08 | < .08 | .04   | .04   | .10   | < .08 | .04   | < .08 | .05   |
| sdev* | .01   | .03   |       |       |   |       |       |       |       | .02   | .02   |       |       | .01   | .01   | .08   |       | .01   |       | .04   |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

Ambient Air Toxics Data - Chloroform (ppb)  
Date Range: Jan 01, 1998 - Dec 31, 1998

| Months    | 1014  | 1017  | 1018  | 1022  | 2011 | 2018  | 2019  | 2021  | 2024  | 2030  | 3005  | 3007  | 4001  | 5011  | 5011  | 6004  | 7009  | 7013  | 8004  | 9004  |  |
|-----------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Jan05 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 |       | < .02 | < .02 | .03   | < .02 |       | < .02 |       |  |
| Jan06 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .02 |       |       |       |       | < .02 |       | < .02 |  |
| Jan17 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 |       | < .02 | < .08 | < .02 | < .02 | < .02 | < .02 | < .02 | .04   | < .02 | < .02 | < .02 |       |  |
| Jan29 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |       |  |
| Jan30 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .02 |       |       |       |       |       |       | < .02 |  |
| Feb10 98  |       | < .02 |       | < .02 |      | < .02 | < .02 |       |       | < .02 | < .02 | < .02 | < .02 | < .02 |       | .03   | < .02 | < .02 | < .02 |       |  |
| Feb12 98  | < .02 |       | < .02 |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       | < .02 |  |
| Feb22 98  |       | < .08 | < .02 | < .02 |      | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | .05   | < .02 | < .02 | < .02 |       |  |
| Feb25 98  | < .02 |       |       |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       | < .02 |  |
| Mar06 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Mar18 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Mar30 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Apr11 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Apr23 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| May05 98  | < .02 | < .02 |       | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| May11 98  |       |       | < .02 |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| May17 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 |       | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| May29 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Jun10 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Jun22 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .06 | < .02 | < .02 | < .02 | < .02 |  |
| Jul 04 98 | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Jul 16 98 | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Jul 28 98 | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Aug09 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Aug21 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 |       | .04   | < .02 |  |
| Aug25 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .02 |       |       |       |       |       |       |       |  |
| Sep02 98  | < .02 | < .02 | < .02 | .04   |      | < .02 |       | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |       | .05   |  |
| Sep03 98  |       |       |       |       |      |       | < .02 |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Sep14 98  | .04   | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Sep26 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Sep29 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .02 |       |       |       |       |       |       |       |  |
| Oct07 98  |       |       |       |       |      |       |       |       |       |       |       |       |       | < .02 |       |       |       |       |       |       |  |
| Oct08 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 |       | .16   | < .02 | .06   | < .02 | < .02 |  |
| Oct20 98  | < .02 | .04   | .03   | < .02 |      | .03   | .05   | < .02 |       | .04   | < .02 | < .02 | .05   | .08   | .09   | .07   | < .02 | .06   | .04   | < .02 |  |
| Nov01 98  | < .02 | .02   | < .02 | < .02 |      | < .02 | .03   | < .02 |       | .02   | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Nov13 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Nov25 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | .04   | .06   | .06   | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Dec07 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | .05   | .05   | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Dec19 98  | < .02 | < .02 | < .02 | < .02 |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |
| Dec31 98  | < .02 | < .02 | < .02 |       |      | < .02 | < .02 | < .02 |       | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |  |

|       |       |       |       |       |   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| # OBS | 31    | 31    | 31    | 30    | 0 | 31    | 30    | 24    | 6     | 31    | 31    | 31    | 31    | 32    | 29    | 31    | 31    | 31    | 31    | 8     |
| #<LOD | 30    | 29    | 30    | 29    | 0 | 30    | 28    | 24    | 6     | 29    | 31    | 31    | 29    | 29    | 26    | 24    | 31    | 28    | 29    | 8     |
| Max   | .04   | < .08 | .03   | .04   |   | .03   | .05   | < .02 | < .02 | < .08 | < .02 | < .02 | .05   | .08   | .09   | .16   | < .02 | .06   | .05   | < .02 |
| Min   | < .02 | < .02 | < .02 | < .02 |   | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 | < .02 |
| mean* | .01   | .01   | .01   | .01   |   | .01   | .01   | < .02 | < .02 | .01   | < .02 | < .02 | .01   | .02   | .02   | .02   | < .02 | .01   | .01   | < .02 |
| sdev* | .01   | .01   | .00   | .01   |   | .00   | .01   |       |       | .01   | < .02 | < .02 | .01   | .02   | .02   | .03   |       | .01   | .01   |       |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

Ambient Air Toxics Data - Methylene chloride (ppb)  
Date Range: Jan 01, 1998 - Dec 31, 1998

| Months    | 1014  | 1017  | 1018  | 1022  | 2011 | 2018  | 2019  | 2021  | 2024  | 2030  | 3005  | 3007  | 4001  | 5011  | 5011  | 6004  | 7009  | 7013  | 8004  | 9004  |  |
|-----------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Jan05 98  | < .50 | < .50 | < .50 | < .50 |      | < .50 | < .50 |       | < .50 | < .50 | .60   | < .50 |       | .60   | .60   | 2.20  | < .50 |       | 1.10  |       |  |
| Jan06 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .50 |       |       |       |       | .60   |       |       |  |
| Jan17 98  | .70   | < .50 | .70   | < .50 |      | < .50 | < .50 |       | .60   | < .50 | < .50 | < .50 | 1.50  | .80   | .80   | .80   | < .50 | < .50 | 1.30  |       |  |
| Jan29 98  | < .50 | < .50 | < .50 | < .50 |      | < .50 | .60   |       | < .50 | < .50 | < .50 | < .50 |       | < .50 | < .50 | 2.20  | < .50 | < .50 |       |       |  |
| Jan30 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .50 |       |       |       |       |       |       | .90   |  |
| Feb10 98  |       | 1.20  |       | < .50 |      | .60   | < .50 |       | < .50 | .60   | < .50 | < .50 | < .50 | 1.20  |       | 2.60  | < .50 | < .50 | < .50 |       |  |
| Feb12 98  | < .50 |       | .80   |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Feb22 98  |       | < .50 | < .50 | < .50 |      | < .50 | < .50 |       | .60   | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | 13.10 | 1.00  | < .50 | .70   |       |  |
| Feb25 98  | 1.00  |       |       |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Mar06 98  | < .50 | < .50 | < .50 | < .50 |      | < .50 | < .50 |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 |  |
| Mar18 98  | .50   | < .50 | < .50 | .50   |      | .60   | < .50 |       | .60   | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .90   | .50   | < .50 | .70   |       |  |
| Mar30 98  | < .50 | .60   | < .50 | < .50 |      | < .50 | 1.50  | < .50 |       | < .50 | < .50 | < .50 | < .50 | .80   | .80   | 1.10  | < .50 | < .50 | .70   |       |  |
| Apr11 98  | < .50 | .80   | < .50 | < .50 |      | < .50 | < .50 | < .50 |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | 3.90  | < .50 | < .50 | < .50 |       |  |
| Apr23 98  | .50   | < .50 | < .50 | < .50 |      | < .50 | < .50 | < .50 |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .60   | < .50 | < .50 | .60   |       |  |
| May05 98  | < .50 | < .50 |       | < .50 |      | < .50 | < .50 | .80   |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .80   | < .50 | < .50 | 1.70  |       |  |
| May11 98  |       |       | < .50 |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| May17 98  | < .50 | < .50 | < .50 | < .50 |      | < .50 |       | < .50 |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .80   | < .50 | < .50 |       |  |
| May29 98  | < .50 | < .50 | < .50 | < .50 |      | < .50 | .90   | < .50 |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 |       |  |
| Jun10 98  | < .50 | .80   | < .50 | < .50 |      | < .50 | < .50 | .50   |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .50   | < .50 | < .50 | < .50 |       |  |
| Jun22 98  | < .50 | .60   | < .50 | < .50 |      | < .50 | < .50 | < .50 |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | 1.50  | < .50 | < .50 | < .50 |       |  |
| Jul 04 98 | .50   | .50   | < .50 | < .50 |      | < .50 | < .50 | .60   |       | < .50 | < .50 | < .50 | .80   | < .50 | < .50 | < .50 | < .50 | < .50 | .50   |       |  |
| Jul 16 98 | < .50 | < .50 | < .50 | < .50 |      | < .50 | < .50 | .50   |       | < .50 | < .50 | < .50 | .50   | < .50 | < .50 | 1.20  | .80   | .50   | < .50 |       |  |
| Jul 28 98 | < .50 | < .50 | < .50 | < .50 |      | < .50 | < .50 | .60   |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 |       |  |
| Aug09 98  | < .50 | < .50 | < .50 | < .50 |      | < .50 | < .50 | < .50 |       | < .50 | < .50 | < .50 | .80   | < .50 | < .50 | < .50 | 1.00  | < .50 | < .50 |       |  |
| Aug21 98  | < .50 | < .50 | .50   | < .50 |      | < .50 | < .50 | .60   |       | < .50 | < .50 | < .50 |       | .70   | .80   | < .50 | < .50 | .60   | < .50 |       |  |
| Aug25 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .50 |       |       |       |       |       |       |       |  |
| Sep02 98  | .70   | .50   | < .50 | < .50 |      | < .50 |       | < .50 |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | 1.00  | .50   | < .50 | 1.20  |       |  |
| Sep03 98  |       |       |       |       |      |       | < .50 |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Sep14 98  | 1.80  | .50   | < .50 | < .50 |      | < .50 | < .50 | < .50 |       | < .50 | .50   | < .50 | < .50 | < .50 | < .50 | .70   | < .50 | < .50 | .60   |       |  |
| Sep26 98  | < .50 | < .50 | < .50 | < .50 |      | < .50 | < .50 | < .50 |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .70   | .60   | .80   |       |  |
| Sep29 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .50 |       |       |       |       |       |       |       |  |
| Oct07 98  |       |       |       |       |      |       |       |       |       |       |       |       |       | < .50 |       |       |       |       |       |       |  |
| Oct08 98  | 1.20  | < .50 | < .50 | < .50 |      | < .50 | < .50 | < .50 |       | < .50 | 1.50  | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .80   | .60   | < .50 |  |
| Oct20 98  | 1.60  | < .50 | < .50 | < .50 |      | < .50 | .50   | < .50 |       | 2.80  | .50   | < .50 | .60   | < .50 | < .50 | .90   | 1.30  | < .50 | < .50 | < .50 |  |
| Nov01 98  | < .50 | .50   | < .50 | < .50 |      | .60   | < .50 | < .50 |       | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .60   | < .50 | .70   | < .50 | < .50 |  |
| Nov13 98  | < .50 | < .50 | < .50 | < .50 |      | < .50 | < .50 | < .50 |       | < .50 | < .50 | < .50 | < .50 | .50   | .50   | .90   | < .50 | < .50 | 1.20  | < .50 |  |
| Nov25 98  | .80   | < .50 | < .50 | < .50 |      | < .50 | .60   | < .50 |       | < .50 | < .50 | < .50 | .60   | .80   | .80   | 2.60  | < .50 | < .50 | < .50 | < .50 |  |
| Dec07 98  | 1.10  | < .50 | < .50 | < .50 |      | < .50 | < .50 | 1.30  |       | 1.00  | < .50 | < .50 | < .50 | .80   | .80   | 3.20  | < .50 | < .50 | < .50 | < .50 |  |
| Dec19 98  | 1.20  | < .50 | < .50 | < .50 |      | < .50 | < .50 | < .50 |       | 2.00  | < .50 | < .50 | < .50 | .90   | .90   | < .50 | < .50 | < .50 | < .50 | < .50 |  |
| Dec31 98  | .50   | .80   | < .50 |       |      | < .50 | < .50 | < .50 |       | 2.60  | < .50 | < .50 | < .50 | < .50 | < .50 | .90   | < .50 | < .50 | < .50 | < .50 |  |

|       |       |       |       |       |   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| # OBS | 31    | 31    | 31    | 30    | 0 | 31    | 30    | 24    | 6     | 31    | 31    | 31    | 31    | 32    | 29    | 31    | 31    | 31    | 31    | 8     |
| #<LOD | 18    | 21    | 28    | 29    | 0 | 28    | 25    | 17    | 3     | 27    | 26    | 31    | 25    | 22    | 21    | 10    | 23    | 25    | 17    | 8     |
| Max   | 1.80  | 1.20  | .80   | < .50 |   | .60   | 1.50  | 1.30  | .60   | 2.80  | 1.50  | < .50 | 1.50  | 1.20  | .90   | 13.10 | 1.30  | .80   | 1.70  | < .50 |
| Min   | < .50 | < .50 | < .50 | < .50 |   | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 |
| mean* | .54   | .39   | .29   | .26   |   | .28   | .34   | .38   | .43   | .49   | .33   | < .50 | .36   | .43   | .39   | 1.44  | .40   | .32   | .54   | < .50 |
| sdev* | .44   | .24   | .13   | .05   |   | .11   | .26   | .25   | .19   | .68   | .24   |       | .27   | .29   | .24   | 2.37  | .29   | .16   | .40   |       |

\* includes Obs < LOD as 1/2 LOD



**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

Ambient Air Toxics Data - Benzene (ppb)  
Date Range: Jan 01, 1998 - Dec 31, 1998

| Months    | 1014 | 1017 | 1018 | 1022 | 2011 | 2018 | 2019 | 2021 | 2024 | 2030 | 3005 | 3007  | 4001 | 5011 | 5011 | 6004 | 7009 | 7013 | 8004 | 9004 |  |
|-----------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|--|
| Jan05 98  | .90  | 1.60 | .70  | .50  |      | 1.40 | .70  |      | 1.10 | .50  | 1.00 | .20   |      | 1.00 | .80  | 1.80 | 1.50 |      | 2.00 |      |  |
| Jan06 98  |      |      |      |      |      |      |      |      |      |      |      |       | .70  |      |      |      |      | 1.00 |      |      |  |
| Jan17 98  | 1.10 | 1.20 | .40  | .60  |      | 1.10 | .70  |      | .80  | .60  | .50  | .20   | .90  | .70  | .60  | 1.20 | .80  | .80  | 1.00 | 1.00 |  |
| Jan29 98  | .70  | .70  | .40  | .40  |      | .50  | .40  |      | .60  | .50  | .70  | .10   |      | .90  | .80  | .80  | .90  | .50  |      |      |  |
| Jan30 98  |      |      |      |      |      |      |      |      |      |      |      |       | .70  |      |      |      |      |      |      | 1.30 |  |
| Feb10 98  |      | 1.00 |      | .50  |      | .90  | .70  |      |      | .60  | 1.20 | .20   | 1.00 | .80  |      | 1.00 | .70  | .60  |      | 1.20 |  |
| Feb12 98  | .70  |      | .50  |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |  |
| Feb22 98  |      | .80  | .40  | .40  |      | .60  | .60  |      | .60  | .60  | .50  | .20   | .80  | .90  | 1.00 | .80  | .80  | .60  |      | 1.20 |  |
| Feb25 98  | 1.00 |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |  |
| Mar06 98  | .90  | .60  | .30  | .30  |      | .60  | .40  |      | .40  | .40  | .50  | .10   | .80  | .60  | .60  | .70  | .70  | .60  |      | 1.10 |  |
| Mar18 98  | .70  | .80  | .50  | .70  |      | .60  | .60  |      | .50  | .50  | .60  | .20   | .80  | .70  | .70  | .70  | .90  | .60  | .70  |      |  |
| Mar30 98  | .80  | .70  | .50  | .50  |      | .50  | .60  | .40  |      | .50  | .70  | .30   | .90  | .80  | .60  | .70  | .70  | .50  | .90  |      |  |
| Apr11 98  | .40  | .30  | .10  | .20  |      | .30  | .30  | .30  |      | .30  | .40  | .10   | .30  | .20  | .30  | .40  | .40  | .20  | .30  |      |  |
| Apr23 98  | .30  | .40  | .20  | .30  |      | .20  | .60  | .10  |      | .20  | .40  | .10   | .40  | .30  | .40  | .30  | .40  | .50  | .20  |      |  |
| May05 98  | .60  | .60  |      | .30  |      | .40  | .30  | .20  |      | .30  | .60  | .10   | .60  | .40  | .40  | .50  | .50  | .60  | .30  |      |  |
| May11 98  |      |      | .30  |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |  |
| May17 98  | .40  | .20  | .20  | .20  |      | .20  |      | .20  |      | .30  | .30  | .10   | .30  | .30  | .40  | .40  | .40  | .10  | .20  |      |  |
| May29 98  | .70  | .30  | .30  | .30  |      | .30  | .40  | .30  |      | .20  | .40  | .10   | .50  | .40  | .30  | .40  | .40  | .40  | .30  |      |  |
| Jun10 98  | .30  | .20  | .30  | .30  |      | .20  | .20  | .20  |      | .20  | .20  | < .10 | .30  | .40  | .40  | .20  | .40  | .30  | .30  |      |  |
| Jun22 98  | .20  | .40  | .10  | .20  |      | .30  | .10  | .20  |      | .10  | .30  | < .10 | .20  | .30  | .50  | .60  | .20  | .30  | .20  |      |  |
| Jul 04 98 | .30  | .30  | .30  | .20  |      | .20  | .10  | .20  |      | .20  | .20  | < .10 | .30  | .20  | .20  | .30  | .10  | .30  | .20  |      |  |
| Jul 16 98 | 1.00 | .70  | .80  | .80  |      | .40  | .30  | .50  |      | .30  | .40  | < .10 | .70  | .80  | .80  | .70  | 1.00 | .50  | .50  |      |  |
| Jul 28 98 | .20  | .30  | .30  | .20  |      | .30  | .20  | .20  |      | .20  | .30  | < .10 | .30  | .20  | .20  | .30  | .20  | .30  | .20  |      |  |
| Aug09 98  | .20  | .20  | .20  | .20  |      | .20  | .10  | .20  |      | .10  | .20  | < .10 | .40  | .30  | .20  | .30  | .40  | .20  | .20  |      |  |
| Aug21 98  | .50  | .40  | .30  | .40  |      | .30  | .30  | .40  |      | .30  | .40  | .10   |      | .40  | .40  | .50  | .80  | .40  | .30  |      |  |
| Aug25 98  |      |      |      |      |      |      |      |      |      |      |      |       | .30  |      |      |      |      |      |      |      |  |
| Sep02 98  | 1.00 | .80  | .50  | 1.20 |      | .50  |      | .30  |      | .40  | .40  | < .10 | .50  | .70  | .80  | .60  | .70  | .70  | .40  |      |  |
| Sep03 98  |      |      |      |      |      |      | .40  |      |      |      |      |       |      |      |      |      |      |      |      |      |  |
| Sep14 98  | 1.10 | .60  | .30  | .50  |      | .50  | .20  | .30  |      | .10  | .50  | < .10 | .40  | .30  | .30  | .40  | .50  | .50  | .20  |      |  |
| Sep26 98  | .80  | .40  | .40  | .20  |      | .50  | .50  | .20  |      | .40  | .50  | .30   |      | .40  | .40  | .40  | .40  | .60  | .50  |      |  |
| Sep29 98  |      |      |      |      |      |      |      |      |      |      |      |       | .30  |      |      |      |      |      |      |      |  |
| Oct07 98  |      |      |      |      |      |      |      |      |      |      |      |       |      | .40  |      |      |      |      |      |      |  |
| Oct08 98  | .70  | .40  | .40  | .50  |      | .40  | .30  | .30  |      | .40  | .50  | .10   | .50  | .40  |      | 1.50 | 1.00 | 2.00 | .40  | .40  |  |
| Oct20 98  | 1.40 | .80  | .90  | .60  |      | 1.40 | 1.20 | .70  |      | .90  | 1.00 | .30   | 1.40 | 2.00 | 2.00 | 1.50 | 2.70 | 1.50 | 1.80 | 1.30 |  |
| Nov01 98  | .90  | .70  | .60  | .50  |      | .80  | .60  | .60  |      | .70  | .50  | .10   | .70  | .70  | .70  | .60  | 1.30 | .50  | .70  | .70  |  |
| Nov13 98  | 1.00 | 1.50 | .60  | .50  |      | 1.30 | 1.00 | 1.20 |      | .90  | 1.10 | .20   | 1.60 | 1.50 | 1.50 | 2.20 | 2.80 | 1.50 | 1.70 | 1.10 |  |
| Nov25 98  | 1.20 | 1.30 | .70  | .50  |      | 1.00 | 1.20 | .60  |      | .90  | 1.20 | .30   | 1.00 | 1.50 | 1.30 | 1.40 | 2.10 | 1.20 | 2.20 | 1.00 |  |
| Dec07 98  | 1.30 | 1.60 | .70  | .70  |      | 1.40 | 1.00 | .50  |      | .90  | 1.10 | .20   | 1.30 | 1.00 | 1.00 | 1.90 | 1.80 | 1.40 | 2.10 | 1.30 |  |
| Dec19 98  | .60  | .60  | .20  | .30  |      | .40  | .30  | .20  |      | .30  | .50  | < .10 | 1.10 | .30  | .40  | .50  | .70  | .20  | .20  | 1.00 |  |
| Dec31 98  | 1.00 | .70  | .70  |      |      | .80  | .70  | .60  |      | .60  | .50  | .10   | 1.10 | 1.00 | 1.00 | 1.20 | 1.20 | .80  | 1.40 | .90  |  |
| # OBS     | 31   | 31   | 31   | 30   | 0    | 31   | 30   | 24   | 6    | 31   | 31   | 31    | 31   | 32   | 29   | 31   | 31   | 31   | 31   | 8    |  |
| #<LOD     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 9     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |  |
| Max       | 1.40 | 1.60 | .90  | 1.20 |      | 1.40 | 1.20 | 1.20 | 1.10 | .90  | 1.20 | .30   | 1.60 | 2.00 | 2.00 | 2.20 | 2.80 | 2.00 | 2.20 | 1.30 |  |
| Min       | .20  | .20  | .10  | .20  |      | .20  | .10  | .10  | .40  | .10  | .20  | .10   | .20  | .20  | .20  | .20  | .10  | .10  | .20  | .40  |  |
| mean*     | .74  | .68  | .42  | .43  |      | .60  | .50  | .37  | .67  | .43  | .57  | .13   | .68  | .66  | .64  | .80  | .88  | .65  | .78  | .96  |  |
| sdev*     | .34  | .40  | .21  | .22  |      | .39  | .31  | .24  | .25  | .24  | .29  | .09   | .37  | .42  | .42  | .53  | .67  | .45  | .65  | .30  |  |

\* includes Obs < LOD as 1/2 LOD





**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

Ambient Air Toxics Data - 1,3-butadiene (ppb)  
Date Range: Jan 01, 1998 - Dec 31, 1998

| Months    | 1014  | 1017  | 1018  | 1022  | 2011 | 2018  | 2019  | 2021  | 2024  | 2030  | 3005  | 3007  | 4001  | 5011  | 5011  | 6004  | 7009  | 7013  | 8004  | 9004  |  |
|-----------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Jan05 98  | .60   | .90   | < .30 | < .30 |      | .80   | < .30 |       | .80   | < .30 | .50   | < .30 |       | .50   | .50   | .80   | .70   |       | 1.00  |       |  |
| Jan06 98  |       |       |       |       |      |       |       |       |       |       |       |       | .40   |       |       |       |       | .60   |       |       |  |
| Jan17 98  | .70   | .60   | .50   | .60   |      | .90   | .40   |       | .40   | .40   | < .30 | < .30 | .70   | .60   | .70   | .70   | .60   | .60   | .60   |       |  |
| Jan29 98  | .60   | < .30 | < .30 | < .30 |      | .60   | < .30 |       | .40   | .30   | .60   | < .30 |       | .40   | .40   | .60   | .40   | < .30 |       |       |  |
| Jan30 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .30 |       |       |       |       |       |       | .70   |  |
| Feb10 98  |       | .60   |       | .40   |      | .90   | .40   |       |       | .30   | .60   | < .30 | .60   | .60   |       | .60   | .40   | .40   |       | .70   |  |
| Feb12 98  | .60   |       | .30   |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Feb22 98  | < .30 | .30   | .40   |       |      | .30   | < .30 |       | < .30 | .40   | < .30 | < .30 | < .30 | < .30 | < .30 | .50   | .50   | .50   | .60   |       |  |
| Feb25 98  | .80   |       |       |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Mar06 98  | .70   | < .30 | < .30 | .30   |      | .60   | < .30 |       | < .30 | < .30 | .40   | < .30 | < .30 | < .30 | < .30 | .50   | < .30 | < .30 | .50   |       |  |
| Mar18 98  | .60   | .40   | .30   | .60   |      | .50   | < .30 |       | < .30 | .50   | .40   | < .30 | < .30 | .40   | < .30 | .50   | .50   | < .30 | .40   |       |  |
| Mar30 98  | < .30 | < .30 | .30   | < .30 |      | .50   | .60   | < .30 |       | < .30 | .30   | < .30 | .40   | .30   | .30   | < .30 | .30   | .30   | < .30 |       |  |
| Apr11 98  | .30   | < .30 | < .30 | .40   |      | .30   | < .30 | < .30 |       | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 |  |
| Apr23 98  | < .30 | < .30 | < .30 | .40   |      | .40   | < .30 | < .30 |       | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | .40   | .30   | < .30 | < .30 | < .30 |  |
| May05 98  | .70   | < .30 |       | .30   |      | .60   | < .30 | .30   |       | < .30 | < .30 | < .30 | .50   | .30   | .30   | .50   | < .30 | < .30 | < .30 |       |  |
| May11 98  |       |       | < .30 |       |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| May17 98  | .40   | < .30 | < .30 | < .30 |      | < .30 |       | < .30 |       | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | .40   | < .30 | < .30 |       |  |
| May29 98  | .40   | .30   | < .30 | .40   |      | .40   | < .30 | < .30 |       | < .30 | < .30 | < .30 | .30   | < .30 | < .30 | .30   | .30   | < .30 | < .30 |       |  |
| Jun10 98  | .50   | < .30 | .30   | .40   |      | .30   | < .30 | < .30 |       | < .30 | .30   | < .30 | .30   | < .30 | < .30 | < .30 | < .30 | .30   | < .30 | < .30 |  |
| Jun22 98  | < .30 | < .30 | < .30 | .30   |      | .40   | .30   | < .30 |       | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | .40   | < .30 | < .30 | < .30 | < .30 |  |
| Jul 04 98 | .40   | < .30 | < .30 | .30   |      | .50   | < .30 | < .30 |       | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 |  |
| Jul 16 98 | .60   | < .30 | .40   | .60   |      | .60   | < .30 | < .30 |       | .40   | .40   | < .30 | .40   | .40   | .40   | .40   | .50   | .50   | .50   | .30   |  |
| Jul 28 98 | .40   | < .30 | < .30 | .40   |      | .40   | < .30 | < .30 |       | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | .50   | < .30 | .30   | < .30 | < .30 |  |
| Aug09 98  | .40   | .30   | < .30 | .30   |      | < .30 | < .30 | .30   |       | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | .30   | < .30 | .30   | < .30 | < .30 |  |
| Aug21 98  | .60   | .40   | < .30 | .50   |      | .40   | < .30 | .40   |       | < .30 | < .30 | < .30 |       | .40   | .40   | .40   | < .30 | < .30 | < .30 |       |  |
| Aug25 98  |       |       |       |       |      |       |       |       |       |       |       |       | < .30 |       |       |       |       |       |       |       |  |
| Sep02 98  | .80   | .30   | .30   | < .30 |      | .50   |       | .40   |       | < .30 | .40   | < .30 | < .30 | .30   | .30   | < .30 | .30   | .40   | < .30 |       |  |
| Sep03 98  |       |       |       |       |      |       | < .30 |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Sep14 98  | 1.00  | < .30 | < .30 | < .30 |      | .30   | < .30 | .30   |       | < .30 | < .30 | < .30 | .40   | .30   | .30   | .30   | .30   | .50   | .30   |       |  |
| Sep26 98  | .60   | .40   | .30   | < .30 |      | .60   | .50   | < .30 |       | .40   | .30   | < .30 |       | .40   | .40   | < .30 | < .30 | .30   | .40   |       |  |
| Sep29 98  |       |       |       |       |      |       |       |       |       |       |       |       | .30   |       |       |       |       |       |       |       |  |
| Oct07 98  |       |       |       |       |      |       |       |       |       |       |       |       |       |       | .60   |       |       |       |       |       |  |
| Oct08 98  | .60   | .40   | < .30 | .50   |      | < .30 | < .30 | < .30 |       | .50   | .30   | < .30 | < .30 | .50   |       | .80   | .40   | .80   | .30   | .30   |  |
| Oct20 98  | .30   | .30   | < .30 | .50   |      | .40   | .40   | .30   |       | 1.00  | .60   | .30   | .50   | .70   | .70   | .80   | 1.00  | .60   | .70   | .50   |  |
| Nov01 98  | .30   | .50   | < .30 | .30   |      | .80   | .50   | .40   |       | .40   | .40   | < .30 | < .30 | .30   | .30   | .30   | .60   | .50   | .40   | .40   |  |
| Nov13 98  | .60   | .30   | < .30 | .50   |      | .80   | .30   | < .30 |       | .60   | < .30 | .30   | .50   | .30   | .30   | .80   | .90   | .30   | .60   | < .30 |  |
| Nov25 98  | .70   | .60   | < .30 | .40   |      | .80   | < .30 | .30   |       | .60   | .50   | .30   | .30   | .30   | .40   | .70   | .90   | < .30 | .40   | < .30 |  |
| Dec07 98  | .80   | 1.00  | < .30 | .30   |      | 1.10  | .70   | .40   |       | .90   | < .30 | < .30 | .40   | .40   | .30   | 1.00  | .90   | .60   | 1.20  | < .30 |  |
| Dec19 98  | < .30 | < .30 | < .30 | < .30 |      | < .30 | < .30 | < .30 |       | .30   | < .30 | < .30 | .50   | .50   | .40   | < .30 | < .30 | < .30 | < .30 | < .30 |  |
| Dec31 98  | .80   | < .30 | < .30 |       |      | < .30 | .40   | .50   |       | < .30 | < .30 | < .30 | .30   | .40   | .40   | .90   | .80   | < .30 | .30   | .30   |  |

|       |       |       |       |       |   |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |     |
|-------|-------|-------|-------|-------|---|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| # OBS | 31    | 31    | 31    | 30    | 0 | 31   | 30    | 24    | 6     | 31    | 31    | 31    | 31    | 32    | 29    | 31    | 31    | 31    | 31    | 31    | 8   |
| #<LOD | 4     | 16    | 22    | 8     | 0 | 5    | 20    | 14    | 3     | 17    | 17    | 28    | 15    | 11    | 11    | 8     | 11    | 14    | 13    | 3     |     |
| Max   | 1.00  | 1.00  | .50   | .60   |   | 1.10 | .70   | .50   | .80   | 1.00  | .60   | < .30 | .70   | .70   | .70   | 1.00  | 1.00  | .80   | 1.20  | .50   |     |
| Min   | < .30 | < .30 | < .30 | < .30 |   | .30  | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | < .30 | .30 |
| mean* | .53   | .31   | .20   | .34   |   | .50  | .25   | .24   | .34   | .31   | .28   | .16   | .29   | .33   | .31   | .46   | .41   | .32   | .38   | .31   |     |
| sdev* | .22   | .23   | .09   | .15   |   | .25  | .16   | .11   | .26   | .23   | .16   | .05   | .16   | .16   | .17   | .26   | .27   | .19   | .27   | .15   |     |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

Ambient Air Toxics Data - Carbon tetrachloride (ppb)  
Date Range: Jan 01, 1998 - Dec 31, 1998

| Months    | 1014 | 1017 | 1018 | 1022 | 2011 | 2018 | 2019 | 2021 | 2024 | 2030 | 3005 | 3007 | 4001 | 5011 | 5011 | 6004 | 7009 | 7013 | 8004 | 9004 |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Jan05 98  | .09  | .10  | .10  | .10  |      | .10  | .10  |      | .11  | .10  | .10  | .10  |      | .10  | .11  | .10  | .10  |      | .10  |      |
| Jan06 98  |      |      |      |      |      |      |      |      |      |      |      |      | .09  |      |      |      |      | .10  |      |      |
| Jan17 98  | .10  | .10  | .11  | .10  |      | .09  | .09  |      | .13  | .10  | .10  | .11  | .09  | .10  | .10  | .10  | .11  | .10  | .10  |      |
| Jan29 98  | .10  | .10  | .10  | .11  |      | .09  | .10  |      | .10  | .10  | .09  | .11  |      | .10  | .10  | .10  | .10  | .11  |      |      |
| Jan30 98  |      |      |      |      |      |      |      |      |      |      |      |      | .09  |      |      |      |      |      |      | .10  |
| Feb10 98  |      | .10  |      | .11  |      | .11  | .10  |      |      | .10  | .11  | .10  | .10  | .10  |      | .10  | .10  | .10  | .10  | .11  |
| Feb12 98  | .09  |      | .11  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Feb22 98  |      | .09  | .10  | .10  |      | .09  | .10  |      | .12  | .10  | .10  | .10  | .10  | .10  | .10  | .10  | .10  | .11  | .10  |      |
| Feb25 98  | .10  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Mar06 98  | .10  | .10  | .10  | .10  |      | .10  | .10  |      | .18  | .10  | .09  | .11  | .09  | .10  | .10  | .10  | .10  | .09  | .10  | .10  |
| Mar18 98  | .09  | .10  | .10  | .10  |      | .10  | .10  |      | .54  | .10  | .10  | .10  | .10  | .10  | .10  | .10  | .09  | .10  | .09  | .10  |
| Mar30 98  | .10  | .10  | .10  | .10  |      | .09  | .10  | .10  |      | .10  | .10  | .10  | .09  | .10  | .10  | .10  | .10  | .10  | .10  | .10  |
| Apr11 98  | .09  | .10  | .10  | .10  |      | .11  | .09  | .10  |      | .10  | .10  | .10  | .09  | .10  | .10  | .10  | .11  | .09  | .10  | .10  |
| Apr23 98  | .09  | .10  | .11  | .10  |      | .10  | .10  | .10  |      | .10  | .09  | .10  | .09  | .10  | .10  | .10  | .10  | .10  | .10  | .10  |
| May05 98  | .09  | .10  |      | .09  |      | .10  | .10  | .15  |      | .10  | .10  | .11  | .09  | .10  | .10  | .11  | .10  | .10  | .10  | .10  |
| May11 98  |      |      | .09  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| May17 98  | .09  | .10  | .10  | .10  |      | .09  |      | .10  |      | .10  | .09  | .10  | .09  | .10  | .10  | .10  | .10  | .10  | .10  | .10  |
| May29 98  | .10  | .10  | .10  | .10  |      | .09  | .10  | .09  |      | .10  | .09  | .11  | .10  | .11  | .10  | .10  | .10  | .09  | .10  | .10  |
| Jun10 98  | .10  | .09  | .10  | .11  |      | .09  | .10  | .11  |      | .11  | .10  | .10  | .10  | .10  | .10  | .11  | .09  | .10  | .10  | .10  |
| Jun22 98  | .10  | .10  | .10  | .10  |      | .10  | .10  | .11  |      | .10  | .09  | .10  | .09  | .10  | .10  | .10  | .10  | .10  | .10  | .10  |
| Jul 04 98 | .10  | .09  | .11  | .10  |      | .09  | .10  | .11  |      | .10  | .09  | .10  | .10  | .11  | .10  | .10  | .10  | .10  | .10  | .09  |
| Jul 16 98 | .10  | .09  | .09  | .10  |      | .09  | .10  | .11  |      | .10  | .10  | .10  | .10  | .10  | .10  | .10  | .10  | .09  | .10  | .10  |
| Jul 28 98 | .10  | .10  | .10  | .10  |      | .10  | .10  | .18  |      | .11  | .09  | .10  | .09  | .10  | .10  | .10  | .10  | .10  | .10  | .10  |
| Aug09 98  | .10  | .10  | .10  | .10  |      | .09  | .10  | .15  |      | .10  | .09  | .10  | .09  | .10  | .10  | .10  | .09  | .11  | .09  | .09  |
| Aug21 98  | .10  | .10  | .10  | .09  |      | .09  | .10  | .10  |      | .10  | .10  | .10  |      | .10  | .10  | .10  | .11  | .10  | .10  | .10  |
| Aug25 98  |      |      |      |      |      |      |      |      |      |      |      |      | .09  |      |      |      |      |      |      |      |
| Sep02 98  | .10  | .10  | .10  | .12  |      | .10  |      | .10  |      | .10  | .09  | .11  | .09  | .10  | .09  | .10  | .10  | .09  | .10  | .10  |
| Sep03 98  |      |      |      |      |      |      | .10  |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Sep14 98  | .10  | .10  | .09  | .10  |      | .12  | .10  | .11  |      | .10  | .10  | .11  | .10  | .09  | .10  | .10  | .10  | .10  | .10  | .10  |
| Sep26 98  | .10  | .11  | .11  | .10  |      | .10  | .10  | .10  |      | .12  | .11  | .11  |      | .10  | .11  | .10  | .11  | .11  | .11  | .11  |
| Sep29 98  |      |      |      |      |      |      |      |      |      |      |      |      | .10  |      |      |      |      |      |      |      |
| Oct07 98  |      |      |      |      |      |      |      |      |      |      |      |      |      | .09  |      |      |      |      |      |      |
| Oct08 98  | .11  | .11  | .10  | .11  |      | .10  | .11  | .10  |      | .10  | .10  | .11  | .09  | .11  | .09  | .10  | .11  | .10  | .10  | .10  |
| Oct20 98  | .10  | .11  | .10  | .10  |      | .10  | .10  | .10  |      | .11  | .09  | .11  | .10  | .09  | .09  | .10  | .10  | .10  | .11  | .09  |
| Nov01 98  | .09  | .10  | .10  | .10  |      | .11  | .10  | .10  |      | .11  | .09  | .10  | .09  | .09  | .10  | .11  | .11  | .11  | .09  | .10  |
| Nov13 98  | .10  | .11  | .11  | .11  |      | .10  | .11  | .10  |      | .10  | .09  | .10  | .10  | .10  | .11  | .10  | .10  | .11  | .11  | .10  |
| Nov25 98  | .09  | .10  | .10  | .11  |      | .09  | .10  | .11  |      | .09  | .10  | .12  | .10  | .10  | .10  | .10  | .10  | .09  | .09  | .10  |
| Dec07 98  | .09  | .11  | .10  | .12  |      | .09  | .11  | .12  |      | .11  | .10  | .12  | .11  | .11  | .11  | .10  | .10  | .10  | .10  | .10  |
| Dec19 98  | .10  | .10  | .11  | .11  |      | .09  | .11  | .12  |      | .11  | .10  | .11  | .09  | .11  | .12  | .11  | .11  | .09  | .11  | .10  |
| Dec31 98  | .10  | .09  | .11  |      |      | .10  | .11  | .13  |      | .11  | .09  | .11  | .10  | .12  | .12  | .10  | .10  | .10  | .09  | .09  |
| # OBS     | 31   | 31   | 31   | 30   | 0    | 31   | 30   | 24   | 6    | 31   | 31   | 31   | 31   | 32   | 29   | 31   | 31   | 31   | 31   | 8    |
| #<LOD     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Max       | .11  | .11  | .11  | .12  |      | .12  | .11  | .18  | .54  | .12  | .11  | .12  | .11  | .12  | .12  | .11  | .11  | .11  | .11  | .10  |
| Min       | .09  | .09  | .09  | .09  |      | .09  | .09  | .09  | .10  | .09  | .09  | .10  | .09  | .09  | .09  | .10  | .09  | .09  | .09  | .09  |
| mean*     | .10  | .10  | .10  | .10  |      | .10  | .10  | .11  | .20  | .10  | .10  | .11  | .09  | .10  | .10  | .10  | .10  | .10  | .10  | .10  |
| sdev*     | .01  | .01  | .01  | .01  |      | .01  | .00  | .02  | .17  | .01  | .01  | .01  | .01  | .01  | .01  | .00  | .01  | .01  | .01  | .00  |

\* includes Obs < LOD as 1/2 LOD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
1998 ANNUAL REPORT  
DECEMBER 1999**

**Ambient Air Toxics Data - Methyl tertiary-butyl ether (ppb)  
Date Range: Jan 01, 1998 - Dec 31, 1998**

| Months    | 1014  | 1017  | 1018  | 1022  | 2011 | 2018  | 2019  | 2021  | 2024 | 2030  | 3005  | 3007  | 4001  | 5011  | 5011  | 6004  | 7009 | 7013  | 8004  | 9004  |  |
|-----------|-------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|--|
| Jan05 98  | 2.40  | 9.00  | 2.30  | 1.00  | ---- | 3.80  | 1.80  | ----  | 3.30 | 1.20  | 2.20  | < .50 | ----  | 2.40  | 2.40  | 5.60  | 4.00 | ----  | 5.10  | ----  |  |
| Jan06 98  |       |       |       |       |      |       |       |       |      |       |       |       | 1.90  |       |       |       |      |       | 2.60  |       |  |
| Jan17 98  | 3.00  | 8.20  | 1.20  | 1.40  |      | 3.70  | 2.20  |       | 2.70 | 1.90  | 1.30  | < .50 | 2.10  | 2.30  | 2.20  | 4.40  | 3.00 | 2.20  | 3.80  |       |  |
| Jan29 98  | 1.80  | 1.20  | .80   | .70   |      | 1.10  | 1.50  |       | 1.50 | 1.30  | 1.80  | < .50 |       | 1.80  | 1.70  | 3.10  | 2.10 | 1.00  |       |       |  |
| Jan30 98  |       |       |       |       |      |       |       |       |      |       |       |       | 2.10  |       |       |       |      |       |       | 3.50  |  |
| Feb10 98  |       | 3.60  |       | .90   |      | 2.30  | 1.60  |       | 1.70 | 3.40  | .60   | 2.30  | 1.70  |       |       | 2.70  | 1.70 | 1.10  | 3.20  |       |  |
| Feb12 98  | 1.80  |       | .90   |       |      |       |       |       |      |       |       |       |       |       |       |       |      |       |       |       |  |
| Feb22 98  |       | 3.00  | .90   | .60   |      | 1.00  | 1.70  |       | 1.30 | 1.60  | .90   | < .50 | 1.50  | 2.20  | 2.20  | 2.50  | 1.60 | .90   | 2.80  |       |  |
| Feb25 98  | 2.30  |       |       |       |      |       |       |       |      |       |       |       |       |       |       |       |      |       |       |       |  |
| Mar06 98  | 2.00  | 1.70  | .50   | .70   |      | 1.30  | .70   |       | 1.00 | .70   | .90   | < .50 | 1.60  | 1.30  | 1.20  | 2.10  | 1.40 | 1.00  | 2.40  |       |  |
| Mar18 98  | 2.00  | 4.10  | 1.20  | 1.40  |      | 1.60  | 1.30  |       | 1.40 | 1.20  | 1.20  | < .50 | 1.90  | 1.60  |       | 2.00  | 2.10 | 1.10  | 2.30  |       |  |
| Mar30 98  | 1.60  | 2.00  | .80   | .60   |      | .90   | 1.50  | < .50 |      | .70   | 1.10  | 1.00  | 1.70  | 1.90  | 1.70  | 2.00  | 1.50 | .70   | 2.50  |       |  |
| Apr11 98  | .70   | .60   | < .50 | < .50 |      | < .50 | 1.10  | < .50 |      | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .90   | .60  | < .50 | .50   |       |  |
| Apr23 98  | .50   | 1.20  | < .50 | < .50 |      | < .50 | .60   | < .50 |      | < .50 | .70   | < .50 | .80   | .50   | .50   | .80   | .70  | .80   | .60   |       |  |
| May05 98  | 1.90  | 2.40  |       | < .50 |      | 1.10  | 2.00  | .70   |      | .80   | 1.20  | < .50 | 1.70  | .90   | 1.00  | 1.60  | 1.50 | 1.00  | 1.00  |       |  |
| May11 98  |       |       | < .50 |       |      |       |       |       |      |       |       |       |       |       |       |       |      |       |       |       |  |
| May17 98  | .80   | 1.10  | .50   | < .50 |      | < .50 |       | < .50 |      | .90   | 1.00  | < .50 | .90   | .60   | .70   | .80   | 1.10 | < .50 | .80   |       |  |
| May29 98  | .70   | .70   | .60   | .60   |      | .50   | 6.00  | < .50 |      | .60   | .80   | < .50 | 1.30  | < .50 | < .50 | .90   | 1.10 | .60   | .80   |       |  |
| Jun10 98  | .50   | < .50 | .50   | < .50 |      | < .50 | .60   | .60   |      | < .50 | .50   | < .50 | .80   | .70   | .60   | .60   | .70  | .60   | .60   |       |  |
| Jun22 98  | < .50 | .80   | < .50 | < .50 |      | < .50 | .60   | .50   |      | < .50 | .50   | < .50 | < .50 | < .50 | .70   | .80   | 2.90 | .50   | .60   | < .50 |  |
| Jul 04 98 | < .50 | .60   | .70   | < .50 |      | < .50 | < .50 | .60   |      | < .50 | < .50 | < .50 | .70   | < .50 | < .50 | .50   | .60  | < .50 | .50   |       |  |
| Jul 16 98 | 3.50  | 2.90  | 2.00  | 1.80  |      | 1.40  | .60   | 1.20  |      | .70   | 1.00  | < .50 | 2.60  | 1.40  | 1.40  | 1.80  | 3.20 | 1.50  | 1.20  |       |  |
| Jul 28 98 | .90   | .80   | < .50 | < .50 |      | .50   | .50   | .50   |      | < .50 | < .50 | < .50 | .70   | < .50 | < .50 | .60   | .80  | .80   | < .50 |       |  |
| Aug09 98  | 1.10  | .80   | < .50 | < .50 |      | .50   | .50   | .60   |      | < .50 | < .50 | < .50 | .70   | < .50 | < .50 | < .50 | .90  | .50   | < .50 |       |  |
| Aug21 98  | 1.10  | 1.60  | .70   | .60   |      | .90   | .70   | 1.20  |      | < .50 | .80   | < .50 |       | .60   | .60   | 1.50  | 2.40 | .80   | .70   |       |  |
| Aug25 98  |       |       |       |       |      |       |       |       |      |       |       |       | .50   |       |       |       |      |       |       |       |  |
| Sep02 98  | 2.70  | 2.70  | .90   | 2.20  |      | 2.60  |       | .90   |      | .50   | .80   | < .50 | 1.20  | 1.10  | 1.10  | 1.20  | 1.90 | 1.80  | .70   |       |  |
| Sep03 98  |       |       |       |       |      |       | 1.20  |       |      |       |       |       |       |       |       |       |      |       |       |       |  |
| Sep14 98  | 2.90  | 1.70  | < .50 | 1.00  |      | 1.40  | .50   | .90   |      | < .50 | .80   | < .50 | .90   | .50   | .60   | 1.20  | 1.50 | .90   | .70   |       |  |
| Sep26 98  | .90   | 1.10  | .50   | < .50 |      | .70   | 1.00  | < .50 |      | .90   | .60   | < .50 |       | .70   | .70   | .80   | .50  | 1.40  | 1.20  |       |  |
| Sep29 98  |       |       |       |       |      |       |       |       |      |       |       |       | 1.00  |       |       |       |      |       |       |       |  |
| Oct07 98  |       |       |       |       |      |       |       |       |      |       |       |       |       | 1.20  |       |       |      |       |       |       |  |
| Oct08 98  | 1.60  | .80   | .70   | 1.00  |      | .60   | 1.00  | .50   |      | 1.20  | .80   | < .50 | 1.90  | 1.10  |       | 3.40  | 1.80 | 4.80  | .50   | .70   |  |
| Oct20 98  | 4.20  | 3.80  | 2.00  | 1.20  |      | 3.60  | 2.80  | 1.40  |      | 2.10  | 1.80  | .60   | 4.30  | 5.10  | 5.20  | 4.90  | 7.40 | 3.50  | 5.60  | 2.80  |  |
| Nov01 98  | 1.70  | 1.70  | .90   | .90   |      | 1.50  | .90   | .70   |      | 1.00  | .80   | < .50 | 1.10  | 1.20  | 1.20  | 1.10  | 2.70 | 1.40  | 1.70  | .80   |  |
| Nov13 98  | 1.80  | 4.00  | 1.00  | 1.00  |      | 2.50  | 1.90  | 2.00  |      | 1.60  | 1.50  | .70   | 3.00  | 2.80  | 2.40  | 4.80  | 7.20 | 2.60  | 4.00  | 2.20  |  |
| Nov25 98  | 3.10  | 3.90  | .90   | 1.00  |      | 1.90  | 1.60  | 1.20  |      | 1.20  | 1.20  | .50   | 2.10  | 2.60  | 2.80  | 3.20  | 4.80 | 1.90  | 4.60  | 1.00  |  |
| Dec07 98  | 2.10  | 3.80  | .60   | 1.00  |      | 2.10  | 1.50  | 1.00  |      | 1.30  | .70   | < .50 | 2.10  | 1.90  | 1.70  | 3.20  | 3.00 | 2.00  | 2.60  | 1.30  |  |
| Dec19 98  | .70   | .80   | < .50 | .50   |      | < .50 | < .50 | < .50 |      | < .50 | < .50 | < .50 | 1.70  | .50   | .60   | < .50 | 1.00 | < .50 | < .50 | .80   |  |
| Dec31 98  | 1.80  | 1.50  | .90   |       |      | .50   | .90   | 1.30  |      | 1.00  | < .50 | < .50 | 1.80  | 2.60  | 2.50  | 1.80  | 2.00 | .80   | 1.50  | .60   |  |

|       |      |       |      |       |   |       |       |       |      |       |       |       |       |       |       |      |      |       |      |      |
|-------|------|-------|------|-------|---|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|------|------|-------|------|------|
| # OBS | 31   | 31    | 31   | 30    | 0 | 31    | 30    | 24    | 6    | 31    | 31    | 31    | 31    | 32    | 29    | 31   | 31   | 31    | 31   | 8    |
| #<LOD | 2    | 1     | 8    | 10    | 0 | 7     | 2     | 6     | 0    | 10    | 6     | 26    | 2     | 5     | 5     | 2    | 0    | 4     | 4    | 0    |
| Max   | 4.20 | 9.00  | 2.30 | 2.20  |   | 3.80  | 6.00  | 2.00  | 3.30 | 2.10  | 3.40  | 1.00  | 4.30  | 5.10  | 5.20  | 5.60 | 7.40 | 4.80  | 5.60 | 2.80 |
| Min   | .50  | < .50 | .50  | < .50 |   | < .50 | < .50 | < .50 | 1.00 | < .50 | < .50 | < .50 | < .50 | < .50 | < .50 | .50  | .50  | < .50 | .50  | .60  |
| mean* | 1.70 | 2.33  | .77  | .75   |   | 1.28  | 1.31  | .74   | 1.87 | .86   | .96   | .32   | 1.53  | 1.36  | 1.32  | 2.05 | 2.11 | 1.29  | 1.82 | 1.28 |
| sdev* | 1.00 | 2.06  | .53  | .50   |   | 1.07  | 1.08  | .46   | .91  | .56   | .67   | .18   | .86   | 1.05  | 1.08  | 1.46 | 1.73 | 1.02  | 1.57 | .80  |

\* includes Obs < LOD as 1/2 LOD

**APPENDIX C-3**

**AIR MONITORING PROGRAMS**

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
TOXIC AIR CONTAMINANTS  
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**AIR MONITORING PROGRAMS**

| Pollutant | Sample Medium       | Agency | Analysis   | Frequency     | Site  | Collocated Site   |
|-----------|---------------------|--------|--|---------------|---|---|
| T.S.P.    | Glass Fiber Filter  | BAAQMD | Mass   | Every 6th day | Pittsburg<br>San Jose - Moorpark  | Pittsburg   |
| T.S.P.    | Glass Fiber Filter  | BAAQMD | Chemical<br>Nitrate<br>Sulfate<br>Chloride         | Every 6th day | Fremont<br>Concord  | None  |
| T.S.P.    | Glass Fiber Filter  | BAAQMD | Chemical<br>Nitrate<br>Sulfate<br>Chloride<br>Lead | Every 6th day | Pittsburg<br>San Pablo<br>San Francisco - Arkansas St.<br>San Jose - Moorpark<br>San Jose - 4th St.   | Pittsburg   |
| T.S.P.    | Glass Fiber Filter  | CARB   | Chemical<br>Arsenic<br>Beryllium<br>Cadmium        | Every 6th day | Fremont<br>Concord<br>San Pablo<br>San Francisco - Arkansas St.<br>San Jose - 4th St.   | None  |
| T.S.P.    | Glass Fiber Filter  | EHLB   | PAH  | Every 6th day | Pittsburg (primary sampler)   | None  |
| PM10      | Quartz Fiber Filter | BAAQMD | Mass   | Every 6th day | Fremont<br>Livermore<br>San Leandro<br>Concord<br>Bethel Island<br>San Pablo<br>San Rafael<br>Napa<br>San Francisco - Arkansas St.<br>Redwood City<br>San Jose - Moorpark<br>San Jose - 4th St.<br>San Jose - Piedmont Rd.<br>San Jose - Tully Rd.<br>Vallejo<br>Santa Rosa | Livermore and<br>San Jose - 4th St. (Rupprecht<br>& Patashnick TEOM 1400) |



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**AIR MONITORING PROGRAMS**

| <b>Pollutant</b> | <b>Sample Medium</b> | <b>Agency</b> | <b>Analysis</b>   | <b>Frequency</b> | <b>Site</b>   | <b>Collocated Site</b> |
|------------------|----------------------|---------------|---|------------------|---|------------------------|
| PM10             | Quartz Fiber Filter  | BAAQMD        | Chemical<br>Sulfate<br>Nitrate<br>Chloride<br>Ammonium<br>Lead<br>Potassium | Every 6th day    | Fremont<br>Livermore<br>San Leandro<br>Concord<br>Bethel Island<br>San Pablo<br>San Rafael<br>Napa<br>San Francisco - Arkansas St.<br>Redwood City<br>San Jose - Moorpark<br>San Jose - 4th St.<br>San Jose - Piedmont Rd.<br>San Jose - Tully Rd.<br>Vallejo<br>Santa Rosa | None                   |
| PM10             | Quartz Fiber Filter  | CARB          | PAH   | Every 6th day    | Fremont<br>Concord<br>San Pablo<br>San Francisco - Arkansas St.<br>San Jose - 4th St.   | None                   |
| PM10             | Quartz Fiber Filter  | EHLB          | PAH   | Every 6th day    | Fremont<br>Concord<br>San Pablo<br>San Jose - Moorpark<br>Santa Rosa  | None                   |

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**AIR MONITORING PROGRAMS**

| Pollutant | Sample Medium | Agency | Analysis   | Frequency      | Site  | Collocated Site              |
|-----------|---------------|--------|--|----------------|---|------------------------------|
| Toxics    | Canister      | CARB   | Chemical<br>Benzene<br>1,3-Butadiene<br>Carbon tetrachloride<br>Chloroform<br>Methylene Chloride<br>Ethyl benzene<br>Ethylene dibromide<br>Ethylene dichloride<br>meta-Dichlorobenzene<br>meta/para-Xylene<br>ortho-Dichlorobenzene<br>ortho-Xylene<br>para-Dichlorobenzene<br>Perchloroethylene<br>Styrene<br>Trichloroethylene<br>Methyl chloroform<br>Toluene | Every 12th day | Fremont<br>Concord<br>San Pablo<br>San Francisco - Arkansas St.<br>San Jose - 4th St.   | Concord                      |
| Toxics    | Canister      | BAAQMD | Chemical<br>Vinyl chloride<br>Dichloromethane<br>Chloroform<br>Ethylene Dichloride<br>1,1,1-Trichloroethane<br>Carbon tetrachloride<br>Trichloroethylene<br>Benzene<br>Ethylene dibromide<br>Perchloroethylene<br>Toluene<br>1,3-Butadiene<br>Methyl tert butyl ether  | Every 12th day | Fremont<br>Livermore<br>Oakland – Davie Stadium<br>San Leandro<br>Concord<br>Antioch<br>San Pablo<br>San Rafael<br>Ft. Cronkhite<br>Napa<br>San Francisco - Arkansas St.<br>Redwood City<br>San Jose - 4th St.<br>Mt. View<br>Vallejo<br>Santa Rosa | San Francisco - Arkansas St. |

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**AIR MONITORING PROGRAMS**

| Pollutant                    | Sample Medium                | Agency | Analysis  | Frequency      | Site  | Collocated Site |
|------------------------------|------------------------------|--------|---|----------------|---|-----------------|
| Total Metals<br>(TSP Lo-Vol) | Teflon Filter                | CARB   | Chemical<br>Total Chromium<br>Manganese<br>Nickel<br>Lead<br>Copper<br>Zinc<br>Aluminum<br>Bromine<br>Barium                  | Every 12th day | Fremont<br>Concord<br>San Pablo<br>San Francisco - Arkansas St.<br>San Jose - 4th St. | None            |
| Total Metals<br>(TSP Lo-Vol) | Cellulose Filter             | CARB   | Chromium VI   | Every 12th day | Fremont<br>Concord<br>San Pablo<br>San Francisco - Arkansas St.<br>San Jose - 4th St. | None            |
| Carbonyls                    | Solid Adsorbent<br>Cartridge | CARB   | Acetaldehyde<br>Formaldehyde<br>Methyl Ethyl Ketone   | Every 12th day | Fremont<br>Concord<br>San Pablo<br>San Francisco - Arkansas St.<br>San Jose - 4th St  | None            |
| Acid<br>Deposition<br>(Wet)  | Plastic Bucket               | CARB   | Conductivity and pH<br>Anions<br>Cations  | Weekly         | Bethel Island   | None            |
| Dichotomous<br>PM10/PM2.5    | Teflon Filter                | CARB   | Mass<br><br>Al, As, Ba, Br, Ca, Cl, Co,<br>Cr, Cu, Fe, Hg, K, Mn, Mo,<br>Ni, P, Pb, Rb, S, Se, Si, Sr,<br>Ti, U, V, Y, Zn, Zr | Every 6th day  | San Jose - 4th St.  | None            |