

Information on ACCESS Database

The DVD/CD contains annual criteria pollutant and toxics summary data in ACCESS version 2003 databases, YRLYACC2 and YRLYAC2H, under the primary directory C:\Program Files\AQDCDAC5. YRLYACC2 contains annual summary information for both criteria and toxics air pollutants. ACCESS is a registered trademark. The ACCESS 2003 runtime software and the ACCESS databases need to be installed on your computer from the DVD/CD. **A printer must be installed on your computer in order for this software to run, but the printer does not need to be connected.** Please refer to the instructions on this DVD/CD for the ACCESS 2003 runtime installation procedures on a Windows XP operating system. After installing the ACCESS programs, from the Windows “start” button, open “programs”, and select “2008 Air Quality Data DVD – Annual Data.”

Opening the “2008 Air Quality Data DVD – Annual Data” program will provide a selection list with 12 options:

1. Run Criteria Pollutant Summary - 1 Pollutant, Multiple Variables -- This option allows the user to produce annual summary reports for any of seven criteria pollutants (CO, H₂S, NO₂, OZONE, PM₁₀, PM_{2.5}, and SO₂). Each report produced contains data for several variables for the specific pollutant.
2. Run Criteria Pollutant Summary - 1 Pollutant, 1 Criteria Variable -- This option allows the user to pick any of the criteria variables in the database and see a report of values for the variable for either 1997-2006 or 1986-2006.
3. Criteria Pollutant Summary - 6 Variable Choice -- This option allows the user to produce annual summary reports for up to six criteria variables in the database for the range of selected years and locations.
4. Run Criteria Pollutant Summary -Top 4 Values – This option allows the user to pick a pollutant-averaging time combination and see the Top 4 daily maximum values and corresponding dates of occurrence for the range of years the user selects.
5. Run Monthly Criteria Pollutant Summary -- This option allows the user to pick from a selection of criteria variables in the database and see a report of the monthly values for the variable for the range of years the user specifies.
6. Run Toxics Summary - 1 Toxics Compound -- This option allows the user to run a summary of any of the 72 toxics compounds in the database and see a report of values for the compound for the range of years the user selects. All reports contain summaries for California. The user can choose to include details for individual monitoring sites. Familiarity with monitoring site details is

recommended to better understand trends for the compound at the statewide level.

7. Toxics Summary - 6 Compound Choice -- This option allows the user to select one annual toxics statistic (e.g. annual average, 90th percentile, or median) and up to six toxics compounds for comparison on the same report.

8. Run Data Availability Summary -- This option allows the user to run a summary of the availability of gaseous or particulate pollutant data for a range of years the user selects. The data availability summary does not include PM2.5 BAM hourly data. The user may also run detailed year by year summaries for individual pollutant groups or subgroups.

9. Run Data Change Summary -- This option allows the user to run a summary indicating the most recent date of change to various pollutant data in the state air quality database. The user specifies a date after which the changed data are identified. This summary may be particularly useful to users who have used data from a previous DVD/CD or data extraction from the state database. It can be used to identify if there were updates to the data obtained previously. A data change summary can be produced for gaseous or particulate pollutant data for a range of years the user selects. The user may also run detailed year by year summaries for individual pollutant groups or subgroups.

10. Run Ozone 8-hour Planning Area Summary - Multiple Variables -- This option allows the user to produce annual summary reports for ozone. Each report produced contains data for several variables for the ozone.

11. Run Ozone Summary -Top 4 Values in the 8-hr. Planning Areas -- This option allows the user to pick a pollutant-averaging time combination and see the Top 4 daily maximum values and corresponding dates of occurrence for the range of years the user selects.

12. Run Monthly Ozone Summary (8-hr Planning Areas) -- This option allows the user to pick from a selection of ozone variables in the database and see a report of the monthly values for the variable for the range of years the user specifies.

These options can be used to produce either reports that can be printed directly or worksheets that extract the information used in the reports. Users who want to use these data in spreadsheets can create a worksheet, and then copy the result into their Windows clipboard and then paste it onto their spreadsheet.

Users that have Microsoft ACCESS version 2000 or later may also want to do their own manipulation of data by linking (attaching) to or importing data from the ACCESS database on the DVD/CD.

The YRLYACC2 database contains the following tables, which the user may find useful:

1. Locations - This is a table describing the monitoring sites and other locations (e.g. air basins) for which annual data are included on this DVD/CD. Among the information included for these locations are: site name, air basin, county, district, ozone 8-hr planning area, MSA, latitude, longitude, and various site identification numbers.
2. Criteria Variables - This is a table of the annual criteria pollutant variables along with their units, description and related information for which annual data are included in the database.
3. Criteria Summary - This is a table in normalized form of annual criteria summary information for the variables included in the Criteria Variables table. Each row in the table contains a location code, year, variable code and value. The location and variable codes can be related to the Locations and Criteria Variables tables described above.
4. Criteria Multicolumn - This table contains the same data as Criteria Summary Table. The table is structured so that each row contains a location code and year and then data for the variables in separate columns. The location code may be related to the Locations table described above.
5. Criteria Multicolumn-PA8 - This table contains the same site ozone data as the Criteria Summary Table, but also includes the pa8 summary data. The table is structured so that each row contains a location code and year and then data for the variables in separate columns. The location code may be related to the Locations table described above.
6. Criteria Multiyear - This table contains the same data as Criteria Summary Table. The table is structured so that each row contains a location code and a variable code and then data for years in separate columns. The location and variable codes may be related to the Locations and Criteria Variable tables described above.
7. Criteria Monthly - This table contains monthly values for a number of the criteria variables included in the annual Criteria Summary Table. The table is structured so that each row contains a location code, a variable code, year and then data for months 1-12 (Jan. - Dec.) in separate columns. The file also

includes the annual value, annual number of complete days, and annual high coverage. The location and variable codes may be related to the Locations and Criteria Variable tables described above.

8. Criteria Monthly-PA8 - This table contains monthly values for a number of the ozone variables included in the annual Criteria Summary Table. The table is structured so that each row contains a location code, a variable code, year and then data for months 1-12 (Jan. - Dec.) in separate columns. The file also includes the annual value, annual number of complete days, and annual high coverage. The location and variable codes may be related to the Locations and Criteria Variable tables described above.

9. Toxics Compounds - This table contains a list of the toxics compounds included on this DVD/CD along with their units.

10. Toxics Summary - This table contains annual summary data for the toxics compounds. Each record in the table contains a compound code, location code, year and various summary parameters. The summary parameters are annual average, annual mean of monthly means, number of samples, number of valid months (containing at least one data sample), standard deviation, maximum, 90th percentile, 75th percentile, median, 25th percentile, 10th percentile, minimum, and risk. Each parameter is listed in a separate column.

11. Top 4 Multicolumn - This table contains the top 4 daily maximum values (and corresponding dates) by year for individual sites and air basins for a number of pollutant-averaging times for which there are either state or national standards. The table includes location and variable codes which may be related to the Locations and Criteria Variable tables described above.

12. Top 4 Multicolumn-PA8 - This table contains the top 4 daily maximum values (and corresponding dates) by year for individual sites and pa8 for a number of pollutant-averaging times for which there are either state or national standards. The table includes location and variable codes which may be related to the Locations and Criteria Variable tables described above.

13. Table List - This is a list of observation data tables (obs_tables) in the state database for which there are data on the DVD/CD. The table key is OBS_TABLE.

14. Inventory of Data - This table lists for individual SITES (identified in the Locations table) and OBS_TABLEs (See Table List) the years with data, the number of data observations for the year, and the date of last update for the yearly block of data.

15. Basins - A list of air basin codes with their corresponding basin name and location codes.

16. PA8 - A list of ozone 8-hr planning area codes with their corresponding pa8 name and location codes.

17. Criteria Data Availability - A summary of the contents of Inventory of Data by air basin, that provides by air basin, year and obs_table the date of last update for the yearly block of data.

18. Criteria Data Availability-PA8 - A summary of the contents of Inventory of Data for ozone by pa8, that provides by pa8, year and obs_table the date of last update for the yearly block of data.

19. Variable - This is a table of the variables used on the DVD/CD along with their units, description and related information.

The above list summarizes 19 of the most important tables. In addition, the database also contains other tables and queries, reports and forms used to summarize and present Annual data on the DVD/CD.

February 2008