

1. [Air Emissions Factors and Quantification](#)

Air Emissions Factors / AP-42

[Basic Information About Air Emissions Factors and Quantification](#)

[AP-42](#): Compilation of Air Emission Factors

Emissions Estimation Tools: Spreadsheets and Methodology Documents

Web Factor and Information Retrieval System ([WebFIRE](#)): The WebFIRE database contains EPA's recommended emissions factors for criteria and hazardous air pollutants (HAP) for industrial and non-industrial processes. In addition, WebFIRE contains the individual data values used to develop the recommended factors and other data submitted to EPA by federal, state, tribal, and local agencies; consultants; and industries.

Emissions Estimation Tools: Software

[TANKS](#): TANKS estimates volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from fixed- and floating-roof storage tanks.

[SPECIATE](#): SPECIATE is the EPA's repository of organic gas and particulate matter (PM) speciation profiles of air pollution sources.

[LandGEM](#): The Landfill Gas Emissions Model (LandGEM) is an automated estimation tool with a Microsoft Excel interface that can be used to estimate emissions rates for total landfill gas, methane, carbon dioxide, nonmethane organic compounds, and individual air pollutants from municipal solid waste landfills. It is available from the EPA's Clean Air Technology Center.

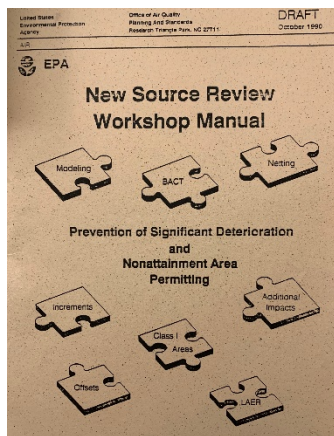
[WATER9](#): WATER9, a wastewater treatment model, consists of analytical expressions for estimating air emissions of individual waste constituents in wastewater collection, storage, treatment, and disposal facilities; a database listing many of the organic compounds; and procedures for obtaining reports of constituent fates, including air emissions and treatment effectiveness.

[Air Emissions Measurement Center](#): EMC provides information on test methods for measuring air pollutants from smokestacks and other industrial stationary sources.

[Clearinghouse for Inventories and Emission Factors \(CHIEF\)](#): Chief provides information on air emissions inventories and modeling, emissions factors, electronic reporting and the emissions monitoring knowledge base.

2. Resources in conducting the BACT analysis

- a. **EPA Guidance.** We also mentioned in the course that EPA issues guidance (either across the program or as individual permit applicants, states, locals raise questions). EPA compiles this information in the “[NSR Policy and Guidance Database](#),” we provided the link in the first Tip Sheet and here it is again. This database was initially set up and maintained by engineers in EPA’s Region 7, thus you may hear people refer to it as the “Region 7 database”.
- b. Document referred to in the course as the “**EPA Puzzle Book.**” This is the “[DRAFT New Source Review Workshop Manual Prevention of Significant Deterioration and Nonattainment Area Permitting](#),” (Oct., 1990).¹ EPA did not issue a final version, it remains “draft.” EPA’s website listing this document explains that, “[t]his document may be of assistance in applying the New Source Review (NSR) air permitting regulations including the Prevention of Significant Deterioration (PSD) requirements. This document is part of the NSR Policy and Guidance Database.” As explained in the class there is a version of the “Puzzle Book” that has picture of a puzzle on the cover. The version with the puzzle cover is no longer on the Internet.



- c. **Administrative appeals of permits issued by EPA.** Additional tip (which has not yet been discussed in class): PSD permits issued by EPA (and states that have “delegated” PSD permit programs) are appealed to [EPA’s Environmental Appeals Board](#) (EAB). The EAB is the final Agency decisionmaker on administrative appeals under all major environmental statutes that EPA administers. It is an impartial body independent of all Agency components outside the immediate Office of the Administrator. The EAB has issued many decisions that involved PSD/NSR permit appeals, which are available on the internet [here](#), and also provide helpful insights in conducting a BACT analysis.

¹ The draft manual is also available in EPA’s [National Service Center for Environmental Publications \(NSCEP\)](#), [here is the link to the manual in NSCEP](#). NSCEP is an excellent place to look for EPA documents available in print, and Google searches will often send you to this site.

3. Clearinghouse Information

- a. US EPA [RACT/BACT/LAER Clearinghouse \(RBLC\) Basic Information](#). This page provides an overview of the RBLC web site and includes instructions for searching the databases.
- b. [RBLC Links for State and Local Air Pollution Control Agencies](#). Here's a page that lists all 50 states (screenshot below).

Alabama			
Agency	Permit Area	Agency Contact	EPA Regional Office Contact
ALABAMA DEPT. OF ENVIRONMENTAL MGMT. <small>(334) 271-7700</small>	Permits	MR. DALE HURST AL DEM AIR DIVISION P. O. BOX 301463 MONTGOMERY, AL 36130-1463 <small>(334) 271-7882</small>	MS. KATY R. FORNEY EPA Region 4 AIR PERMITS SECTION 61 FORSYTH ST., SWATLANTA, GA 30303-8960 <small>(404) 562-9130</small>
HUNTSVILLE AIR POLL CONTROL AGENCY, AL <small>(256) 427-5750</small>		MR. DANIEL SHEA NATURAL RESOURCES & ENV. MGMT. CITY OF HUNTSVILLE P. O. BOX 308 HUNTSVILLE, AL 35804-0308 <small>(205) 427-5750</small>	
JEFFERSON COUNTY DEPT. OF HEALTH, AL <small>(205) 933-9110</small>		MR. JASON HOWANITZ JEFFERSON COUNTY DEPT. OF HEALTH P. O. BOX 2648 BIRMINGHAM, AL 35202 <small>(205) 930-1284</small>	

c. California Air Resources Board

1. [Technology Clearinghouse](#). Technology Clearinghouse that identifies the best technologies for reducing emissions, namely best available control technology (BACT), best available retrofit control technology (BARCT), and related technologies for the control of toxic air contaminants (T-BACT).
 2. [Statewide Best Available Control Technology \(BACT\) Clearinghouse](#). The Statewide Best Available Control Technology (BACT) Clearinghouse is a database developed by the Air Resources Board staff and staffs from various air pollution control and air quality management districts (districts).
- d. **California Air Districts**
1. [South Coast AQMD Permits](#), Main Site. [Best Available Control Technology Site](#).
 2. [BAAQMD BACT Guidance Documents](#). These documents specify the Best Available Control Technology (BACT) requirements for commonly permitted sources subject to New Source Review in the Bay Area Air Quality Management District (BAAQMD), California.
 3. [San Joaquin Valley Air Pollution Control District, BACT](#). Contains the District's BACT Clearinghouse, BACT Policy and other related information.
- e. [European Integrated Pollution Prevention and Control Bureau](#).