The CARE Community Resource Guide

Introduction

Welcome to the CARE Resource Guide for Communities. This guide was developed to help you navigate the United States Environmental Protection Agency's (EPA) website and find information that can help you improve the environment in your community. The Resource Guide was developed for EPA's Community Action for a Renewed Environment (CARE) program. In the CARE program, EPA works with communities to help them come together collaboratively to investigate the toxics problems in their communities and ultimately use EPA voluntary programs to reduce emissions of toxics in the community. The goals of CARE are to reduce risks and empower communities to become stewards of their own environment.

The Resource Guide is designed to help communities in the CARE program, but it can be used by anyone interested in any aspect of working with communities. In the CARE program communities go through a multi-step process: getting organized, analyzing risks, reducing risks, tracking progress. The Resource Guide enables you to find the on-line resources that can help communities through every step of the process as they move from getting organized to becoming stewards of their own environment. The first four parts of the Resource Guide track the CARE process. They are roughly organized in order of the steps a community would go through as it moves through that process:

Stage in the CARE Process	Part of the Resource Guide
The community, in partnership with EPA, creates a collaborative problem solving stakeholder group made up of the various stakeholders in the community.	Part I Getting Started and Building Partnerships
The stakeholder group assesses the community's toxic exposure problems	Part II Understanding the Risks in Your Community
Partnering with EPA, the Stakeholder Group selects and funds projects designed to reduce risk and improve the environment.	Part III Methods to Reduce Your Exposure
The Group tracks progress, evaluates programs, and develops new way to bring funds and new partners into the community to fund further risk reduction measures.	Part IV Tracking Progress and Moving Forward

The Resource Guide has two additional sections to that can help someone in any stage of the process:

Part V   Complete Process Resources: Sites That Have Information on the Whole Process
Part VI   Learning from the Experience of Others: Case Studies

There are a number of sections in each part. Each section has one or more entries. Each entry has a title, a web address and a short description of the material. In general, the entries are organized from tools that are more generally applicable and/or multi-media to entries that have more limited applicability and/or discuss a single media (air, water, waste, etc.) . We have tried to keep information about a single media together within a section. We hope that the Guide will help you find the information you need quickly and easily.

Since the Resource Guide was developed to help you navigate EPA's website, most of the material can be found on our website. However, in order to include some particularly useful information, we did include some material from other federal sources or from sources that we have partnered with to produce the referenced material.

While the material varies in its level of difficulty, most items were written to be understandable by the general public and has no special notes. The more technical documents, data sources or computer models are marked for technical audiences and listed together after the more general material.

When you first come to the Guide on-line, you will see it in outline form. If you want to read the information in a section, click on the section title and the material in that section will appear. You can also choose to look at the whole Guide all at once and you can print a copy of the entire Guide or of any one section. In addition you can use the keyword search feature to find all listings that relate to one of our listed key words.

The Guide will be updated regularly with new material added and outdated material deleted. We will do our best to ensure that web addresses work and are up to date. However, due to the constantly changing nature of the web we can not ensure that every address will work. We apologize in advance for any difficulty that may cause. If you have any problems, comments or questions with the Guide, the CARE website includes a place for you to submit them to us.

We hope you find the Guide useful and we wish you the best of luck in your community work.

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PART I – Getting Started and Building Partnerships

The first step for a community based project is to get organized. This Part contains resources to help you create a community based stakeholder group, organize that group and help to get started. It also contains additional information dealing with environmental justice and tribal issues.

Mobilizing the Community

1.1)   Finding the right people to work on your project

Green Communities: Where Are We Now? How to Get Started
http://epa.gov/greenkit/wher_how.htm
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of what they want to be, developing a plan of action to get them there, and implementing that plan. This section discusses how to get the right mix of stakeholders involved, and identifies tools and resources for stakeholder involvement.

Community Culture and the Environment - A Guide to Understanding a Sense of Place
http://www.epa.gov/ecocommunity/pdf/ccecomplete.pdf
A community profiling guide and social science toolkit for understanding the social dynamics involved in community-based efforts. This publication is best suited for leaders in the environmental field to assist them in understanding community values and processes.

Environmental Justice Collaborative Problem-Solving Model
http://www.epa.gov/compliance/environmentaljustice/interagency/
This comprehensive methodology describes a community-based, multi-agency, and multi-stakeholder collaborative process geared to the unique challenges of communities and tribes confronting environmental justice issues. It serves as a platform for effective strategic planning, partnership building, and leveraging of resources (human, organizational, technical, and financial).

Community Air Screening How To Manual, A Step-by-Step Guide to Using a Risk-Based Approach to Identify Priorities for Improving Outdoor Air Quality
http://www.epa.gov/oppt/cahp/howto.html
This manual includes a chapter on identifying resources, building a partnership, and setting goals to improve local air quality.

1.2)   Creating partnerships

"Towards Collaborative Problem-Solving: Business and Industry Perspectives and Practices on Environmental Justice." Report

http://www.epa.gov/compliance/resources/publications/ej/

This is a report on business and industry perspectives and practices on environmental justice, including case studies of four companies. It provides information to suggest to other corporations seeking to address environmental justice issues.

Guide for Industrial Waste Management: Chapter 1: Understanding Risk and Building Partnerships

http://www.epa.gov/epaoswer/non-hw/industd/chap1s.htm

This chapter introduces risk assessment, including a discussion of several types of risk and the methods used to assess these risks. It describes how partnerships are fostered between a waste-generating company, the community in which it operates, and the state agency that regulates the company.

Partnerships for Safe Water (PSW)

http://www.epa.gov/safewater/psw/psw.html

This program is intended for water utility officials, local officials, interested citizens, and decision-makers. The fact sheet describes the Partnership for Safe Water (PSW), which is a joint venture between OW's Office of Ground Water and Drinking Water (OGWDW) and a number of organizations representing publicly and privately-owned drinking water systems. The program is administered by the utility consortium and consists of a phased approach. Each phase is intended to assist utilities that treat surface water in progressing towards higher water quality goals designed to protect against pathogenic microorganisms.

Community Air Screening How To Manual, A Step-by-Step Guide to Using a Risk-Based Approach to Identify Priorities for Improving Outdoor Air Quality

http://www.epa.gov/oppt/cahp/howto.html

This Manual includes a chapter on identifying resources, building a partnership, and setting goals to improve local air quality.

1.3)   Public outreach

The RCRA Public Participation Manual

http://www.epa.gov/epaoswer/hazwaste/permit/pubpart/manual.htm

This manual provides instruction on how to plan and carry out successful public participation activities in the RCRA permitting and corrective action programs. It presents a broad overview, as well as step-by-step instructions, of the public participation process and guidelines for a successful public participation program. Also available in Spanish (EPA530-R-96-007S) <http://www.epa.gov/epaoswer/general/espanol/rcraspma.pdf>

Getting In Step: A Guide for Conducting Watershed Outreach Campaigns
http://www.epa.gov/owow/watershed/outreach/documents/getnstep.pdf
The purpose of this guide is to provide the tools needed to develop and implement an effective outreach campaign as part of a state or local water quality improvement effort. Whether you're charged with developing a watershed management plan to restore impaired waters or protecting your local water resources for the future, this guide will help you understand the importance of reaching out to people and motivating them to act.

Enhancing Facility-Community Relations
http://www.epa.gov/epaoswer/hazwaste/tsds/site/f02037.pdf
This brochure addresses the importance for facilities to maintain continuous, strong relationships with neighboring communities throughout their operation and after closure.

1.4)   Creating a common vision and setting goals

Green Communities: Where Do We Want to Be?
http://www.epa.gov/greenkit/3intro.htm
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of what they want to be, developing a plan of action to get them there, and implementing that plan. This chapter introduces community visioning processes and provides resources for developing a vision statement.

Community-Based Environmental Protection: A Resource Book for Protecting Ecosystems and Communities – Chapter 2: Getting Started: Goal-Setting and Developing an Organization
http://epa.gov/ecocommunity/pdf/chapter2.pdf
This document identifies practical approaches and tools to help communities carry out their own ecosystem protection efforts. Chapter Two specifically addresses goal setting and organizational development.

Community Air Screening How To Manual, A Step-by-Step Guide to Using a Risk-Based Approach to Identify Priorities for Improving Outdoor Air Quality
http://www.epa.gov/oppt/cahp/howto.html
This manual includes a chapter on identifying resources, building a partnership, and setting goals to improve local air quality.

1.5)   Consensus building & dispute resolution

Resource Guide: Resolving Environmental Conflicts in Communities

http://www.epa.gov/adr/Resguide.pdf
This resource book describes the alternative and appropriate dispute resolution approaches that EPA is using and provides information and contacts to help community members decide if non-adversarial conflict resolution is a good choice for dealing with environmental concerns or disputes.

Environmental Justice Alternative Dispute Resolution Training
http://www.epa.gov/compliance/resources/publications/ej/
This publication includes a set of case studies on the use of dispute resolution in situations involving environmental justice issues. It also involves training workshops on the use of alternative dispute resolution to address environmental justice issues.

1.6)   General Resources on Community Involvement

Stakeholder Involvement & Public Participation at the US EPA: Lessons Learned, Barriers & Innovative Approaches
http://www.epa.gov/publicinvolvement/pdf/sipp.pdf
This report is based upon a review of over thirty formal evaluations and informal summaries from across EPA that describe and/or evaluate Agency stakeholder involvement and public participation activities.

The Model Plan for Public Participation
http://www.epa.gov/compliance/resources/publications/ej/model_public_part_plan.pdf
This plan Includes critical elements for conducting public participation, core values and guiding principles, and a public participation checklist for government agencies.

EPA's Public Involvement Website
http://www.epa.gov/publicinvolvement/
 This website is intended to: 1) share information about public involvement activities across EPA; and, 2) help users understand how different types of public involvement relate to EPA programs and how public input can be used in EPA decision-making processes.

Tools for Public Involvement
http://www.epa.gov/publicinvolvement/involvework.htm
This website contains a list of manuals and tools for planning and conducting effective public involvement activities. Items are grouped into these categories: public involvement manuals, other public involvement tools, EPA programs and regional tools, other federal agencies

Public Involvement in Environmental Permits: A Reference Guide
http://www.epa.gov/permits/publicguide.htm
While the Guide is primarily written for state program implementors, a wide variety of

stakeholders (e.g., citizen groups, associations, industry) participated in its development and can use it to engage in the permitting process.

Superfund Community Involvement
http://www.epa.gov/superfund/action/community/index.htm
The goal of Superfund community involvement is to advocate and strengthen early and meaningful community participation during Superfund cleanups. Key topics include: Technical Assistance Grants (TAGs); Community Advisory Groups (CAG); Superfund Job Training Initiative (SuperJTI); Community Involvement Toolkit; Technical Outreach Services for Communities (TOSC); guidances & publications; information for students and teachers

Community Involvement Toolkit
http://www.epa.gov/superfund/tools/index
This website provides an excellent collection of resources developed for the Superfund Program

Notebook on Local Urban Air Toxics Assessment and Reduction Strategies
http://www.epa.gov/ttn/atw/wks/notebook.html
This is an online notebook that contains fact sheets and presentations covering a variety of topics including: funding information, community involvement, tool kits, and reduction strategies. See Section I. Community Capacity Building.

Air Toxics Risk Assessment Reference Library, Volume 1, Chapter 28 (Community Involvement)
http://www.epa.gov/ttn/fera/data/risk/vol_1/chapter_28.pdf
This chapter provides a broad overview of community involvement in air toxics risk assessment and risk management and identifies helpful references on this topic. Also included throughout this chapter are descriptions of successful air toxics projects and programs where community involvement was a central component of that success.

Environmental Justice and Tribal Concerns

1.7)   Environmental Justice Communities

EPA Environmental Justice Program
http://www.epa.gov/compliance/environmentaljustice/
Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This site provides information about EPA's environmental justice program and provides access to reports, guidances and grants.

National Environmental Justice Advisory Council

http://www.epa.gov/compliance/environmentaljustice/nejac/index.html
The National Environmental Justice Advisory Council (NEJAC) is a federal advisory committee established to provide independent advice, consultation, and recommendations to the Administrator of the EPA on matters related to environmental justice. This site provides information to about NEJAC, its function, meetings, and products. A number of the products are can be useful for communities.

Ensuring Risk Reduction in Communities with Multiple Stressors: Environmental Justice and Cumulative Risks/Impacts - Executive Summary
http://www.epa.gov/Compliance/resources/publications/ej/nejacmtg/nejac-cum-risk-reort-exec-summary.pdf
This website contains an executive summary outlining issues, key concepts, and recommendations to ensure risk reduction in communities with multiple stressors.

Environmental Justice Training
http://www.epa.gov/compliance/training/index.html
This website provides a series of training modules on various environmental justice topics, including an environmental justice fundamentals course, the training provides materials for those interested in providing training on environmental justice.

Environmental Justice Resource Materials and Publications
http://www.epa.gov/compliance/resources/publications/ej/
This EPA environmental justice program publications webpage includes links to: annual and project reports that deal with environmental justice issues, prepared by or for EPA; fact sheets about specific environmental justice topics such as grants, internship programs, and the Interagency Working Group (IWG); publications from the National Environmental Justice Advisory Group (NEJAC); the EJ Bibliography, and a searchable listing of EJ related materials

"Communities and Environmental Laws" DVD
http://www.epa.gov/compliance/resources/publications/ej/ej-dvd.html
The DVD focuses on how citizens can learn about the environmental laws and how these laws can be utilized to help the people make their communities healthier places in which to live. It consists of two case studies where local communities have worked together to address their local environmental or public health issue. The DVD contains an English and Spanish 20 minute video as well as copies of the publication "A Citizen's Guide to Environmental Law" upon which the video was based.

Advancing Environmental Justice through Pollution Prevention
http://www.epa.gov/compliance/resources/publications/ej/
This report contains recommendations for and suggestions of models, approaches, and tools to help communities, state, local, and tribal governments, and business and industry.

OSW's Environmental Justice Website

http://www.epa.gov/epaoswer/osw/ej/

This website describes OSW's strategy for addressing issues and concerns faced by environmental justice communities living near hazardous waste facilities.

Social Aspects of Siting Hazardous Waste Facilities

http://www.epa.gov/epaoswer/hazwaste/tsds/site/k00005.pdf

This booklet has been developed for industries and for government agencies that interact with communities when hazardous waste facilities are sited. It offers examples of quality of life concerns raised by environmental justice communities when facilities are sited. It provides experiences and creative mechanisms that have been developed in order to work effectively with communities, as well as encourage businesses and government agencies to address community concerns early, collaboratively, and compassionately. Also available in Spanish at http://www.epa.gov/epaoswer/general/espanol/sp-sitng.pdf.

OPPT Community Assistance Program (CAP)

http://epa.gov/oppt/cahp/

This Office of Pollution Prevention and Toxics site provides information that may be useful to communities such as: information on chemicals and their effects, tools to help understand and use environmental data, programs and solutions to concerns about chemicals, grants to support community initiatives, forums for Tribes and Environmental Justice communities, and related Programs.

1.8)   Tribal communities

Guide on Consultation and Collaboration with Indian Tribal Governments and the Public Participation of Indigenous Groups and Tribal Citizens

http://www.epa.gov/oeca/resources/publications/ej/ips_consultation_guide.pdf

The purpose of this guide is to enhance the effectiveness of consultation and collaboration between federal government agencies and American Indian and Alaska Native governments. The document is also intended to improve the opportunities for tribal communities and tribal members to have meaningful involvement in the public participation processes.

Tribal Waste Management

http://www.epa.gov/epaoswer/non-hw/tribal/index.htm

This site provides information to encourage municipal solid waste and hazardous waste management practices in Indian Country that are protective of human health and the environment.

Office of Pollution Prevention and Toxics and Tribal Environmental Network

http://www.epa.gov/oppt/tribal/

The EPA's Office of Pollution and Prevention and Toxics (OPPT) has established a Tribal program to better communicate OPPT programs and activities with Native American Indian tribes and to build more effective partnerships with Native American tribes in protecting and safeguarding the environment.

OPPT Community Assistance Program (CAP)
http://epa.gov/oppt/cahp/
This site provides provides information that may be useful to communities such as: information on chemicals and their effects, tools to help understand and use environmental data, programs and solutions to concerns about chemicals, grants to support community initiatives, forums for Tribes and Environmental Justice communities, and related Programs.

For technical audiences:

EPA's Office of Air and Radiation TribalAIR Website
http://www.epa.gov/air/tribal
This website is designed to strengthen EPA and tribal air quality programs in Indian Country by providing timely and user-friendly access to key information, promoting the exchange of ideas, and making available relevant documents to all environmental professionals who live and work in Indian Country. (environmental professionals)

PART II – Understanding the Risks in Your Community

Before you can decide what you want to do, you first should examine the risks in the community so that you can focus on some of the most important ones. This part contains information on the many types of risks you may face from includes those from air, water, wastes, pesticides and others. There is a section which lists general sources of information about the state of the environment in your community. In addition, the section includes material to help you plan your analysis, tools to help you do the analysis and information on how to communicate the results

Types of Risks You May Face

2.1)   Outdoor air pollution

EPA's Office of Air and Radiation Air Pollution Information Gateway
http://www.epa.gov/ebtpages/air.html
This page provides a gateway to a variety of information on common outdoor air pollutants and sources, including ozone, particulate matter, and hazardous air pollutants from industrial and other sources. The links on this page will help you learn about the wide variety of pollutants that may be in your community, where they come from, the types of health effects they may cause, and ways to address the problem.

Community Air Screening How To Manual, A Step-by-Step Guide to Using a Risk-Based Approach to Identify Priorities for Improving Outdoor Air Quality
http://www.epa.gov/oppt/cahp/howto.html
This manual provides a broad overview of outdoor air pollution and a step-by-step guide to help communities identify sources of outdoor air pollution, conduct a risk-based screening analysis to identify priorities, and develop recommendations for taking action to improve outdoor air quality.

Criteria Pollutants Gateway
http://www.epa.gov/air/urbanair/6poll.html
EPA has set national air quality standards for six common pollutants (also referred to as "criteria" pollutants, such as ozone, particulate matter, and lead). This website is a gateway of information on the sources of these pollutants, why they are of concern, health and environmental effects, and efforts underway to help reduce these pollutants in the environment.

Hazardous Air Pollutants Gateway
http://www.epa.gov/ebtpages/airairpohazardousairpollutantshaps.html
Hazardous air pollutants (HAPs), also known as toxic air pollutants, or simply air toxics, are those pollutants that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. EPA currently regulates 188 HAPs. This website is a gateway of information on the sources of these pollutants, why they are of concern, health and environmental effects, and efforts underway to help reduce these pollutants in the environment.

Mobile Source Pollutants Gateway
http://www.epa.gov/ebtpages/airmobilesources.html
The most common mobile sources of air pollution are motor vehicles, but airplanes, ships, construction equipment and lawn mowers also produce significant amounts of pollutants. This website provides a gateway to mobile source air pollution information including information on how EPA regulates the air pollution produced by these sources, mileage and emissions information for new cars, grants for the development of cleaner burning fuels and alternative energy sources, and education for consumers on the ways their actions can affect the environment.

National Air Toxics Assessment (NATA) website
http://www.epa.gov/ttn/atw/nata/index.html
NATA is EPA's ongoing comprehensive evaluation of the status of air toxics in the U.S. NATA activities include: expansion of air toxics monitoring; improved and updated emission inventories (every three years starting from the year of 1996); improved national- and local-scale modeling and assessment tools; and continued research on health effects and exposures to both ambient and indoor air. The goal of NATA is to identify those air toxics which are of greatest potential concern, in terms of contribution to population risk. NATA data can be used to set priorities for the collection of additional air toxics data (e.g., emissions data and ambient monitoring data) or for targeting emission reduction efforts. There are various types of information presented for different audiences.

Air Toxics Risk Assessment Reference Library, Volume 1, Chapter 4, Air Toxics: Chemicals, Sources, and Emissions Inventories
http://www.epa.gov/ttn/fera/data/risk/vol_1/chapter_04.pdf
This website provides a broad overview of air toxics, their sources (including outdoor stationary, indoor, and mobile sources), and available inventories of emissions.

Mobile Sources - Overview of Pollutants and Sources
http://www.epa.gov/otaq/transport.htm
This webpage provides links to information on air pollutants and greenhouse gases from transportation and other mobile sources.

Office of Transportation and Air Quality's (OTAQ) Consumer Information
www.epa.gov/otaq/toxics.htm

This website provides links to a variety of additional information, most of it is directed at technical audiences, but some is appropriate for general audiences.

- "Air Toxics from Motor Vehicles"
  http://www.epa.gov/otaq/f02004.pdf
  A fact sheet that is available on the OTAQ website, it describes why mobile sources and fuel are a source of toxic emissions and EPA's efforts to reduce these emissions.

EPA's Toxic Air Pollutant Website
http://www.epa.gov/air/toxicair/index.html
This page provides links to information about air toxics in the United States. You can find out how much air toxic pollution is in the air, the causes of the pollution, and what the EPA is doing to reduce it.

2002 Trends Report: Air Quality Continues to Improve
http://www.epa.gov/airtrends/toxic.html
This annual report details emission trends for a variety of air pollutants.

Health Effects Notebook for Hazardous Air Pollutants
http://www.epa.gov/ttn/atw/hapindex.html
This website provides links to fact sheets on 188 hazardous air pollutants. The fact sheets provide a wealth of information organized by chemical name.

Diesel Exhaust in the United States
http://www.epa.gov/otaq/retrofit/documents/420f03022.pdf
This fact sheet provides an overview of diesel exhaust health effects and options for reducing pollution from diesel vehicles.

Clean School Bus USA: Human Health
http://www.epa.gov/otaq/schoolbus/humanhealth.htm
Provides general information on health effects of diesel exhaust and who is at risk.

Guide for Industrial Waste Management Chapter 5: Protecting Air
http://www.epa.gov/epaoswer/non-hw/industd/chap5s.htm
This chapter begins with an introduction to federal airborne emission programs, including the Clean Air Act, and describes how they apply to industrial solid waste. The Industrial Waste Air (IWAIR) model is also presented as a tool for assessing risks associated with inhalation of particulates in the ambient air. It includes an explanation of emission control techniques for particulate matter and volatile organic compounds.

Toxics Releases Query Form
http://intranet.epa.gov/enviro/html/tris/tris_query.html
The Toxic Releases Query Form allows you to retrieve data from EPA's Toxics Release Inventory (TRI) database. Your query returns facility information and chemical reports, which tabulate air emissions, surface water discharges, releases to land, underground injections, and transfers to off-site locations. You can narrow your search by selecting from options including facility name, geographic location, standard industrial classification, and chemical names.

For technical audiences:

EPA's Technology Transfer Network: Air Toxics Website
http://www.epa.gov/ttn/atw

This site contains a lot of detailed information for environmental professionals. Among the specific information provided:

- http://www.epa.gov/ttn/atw/pollsour.html - This EPA website provide information on pollutants and their sources. The site has links to EPA's mobile sources and indoor air quality programs.
- http://www.epa.gov/ttn/atw/urban/urbanpg.html - This website provides linkage to an explanation of the Air Toxics Strategy, which is a framework for addressing air toxics emissions in urban areas. The Strategy complements existing national efforts to develop the remaining major source standards, residual risk standards, mobile source standards, and indoor air activities.
- Notebook on Local Urban Air Toxics Assessment and Reduction Strategies http://www.epa.gov/ttn/atw/wks/notebook.html
This online notebook of fact sheets and presentations covers a variety of topics including: funding information, community involvement, tool kits, and reduction strategies. See Section II: Tools for Understanding Local Air Toxics.
- Air CHIEF - http://www.epa.gov/ttn/chief/index.html
The Air Clearing House for Inventories and Emission Factors gives users access to air emission data specific to estimating the types and quantities of pollutants that may be emitted from a wide variety of sources. Air CHIEF contains pages from EPA's most widely used documents as well as the US EPA's Emission Factor and Inventory Groups emission estimation tools.

(designed for environmental professionals)

2.2) In Home and School

EPA's Office of Air and Radiation Indoor Air Pollution Information Gateway
http://www.epa.gov/ebtpages/airindoorairpollution.html
This page provides a gateway to a variety of information on indoor air pollutants and sources. The links on this page will help you learn about the wide variety of pollutants that may affect indoor air, where they come from, the types of health effects they may cause, and the types of things that can be done to address the problem.

OPPTS's Concerned Citizen web page
http://www.epa.gov/oppt/opptcon.htm
This site contains varied information and links related to concerns at home and with the family and workplace issues.

Protect Your Child from Lead Poisoning
http://www.epa.gov/lead/
This page provides families and caregivers with information on how protect children from lead poisoning. This site provides extensive information on how to identify sources of lead exposure and steps families can take to protect children.

2.3) Surface Water

Watershed Academy Web-Based Training – Distance Learning Modules on Key Watershed Management Topics
www.epa.gov/watertrain

Watershed Academy Web modules offer basic instruction on the many disciplines that make up watershed management. Modules run ½ to 2 hours each. These modules focused on "Watershed Change," describe both natural and human-induced changed in watersheds, and compare normal changes with changes of concern.   (Designed for general and/or technical audiences depending on the module)

Guide for Industrial Waste Management Chapter 6: Protecting Surface Water
http://www.epa.gov/epaoswer/non-hw/industd/chap6s.htm
This chapter introduces the methods used to determine the quality and health of surface waters. It then identifies and describes surface water protection programs applicable to waste management units. A separate explanation helps in understanding the fate and transport of pollutants and applies this knowledge to protecting surface waters. This chapter also describes how complying with applicable regulations, implementing storm-water controls, and identifying best management practices (BMPs) to control storm water can help protect surface waters.

Watershed Assessment, Tracking, and Environmental Results (WATERS)
www.epa.gov/waters
WATERS is a searchable database that unifies federal and state data from many different sources to provide accessible water quality information, using a Geographic Information System (GIS) application known as EnviroMapper to create customized maps. **(**Intended for scientists and interested citizens.)

2.4)   Drinking Water

Water on Tap: A Consumer's Guide to the Nation's Drinking Water
http://www.epa.gov/safewater/wot/index.html
Where does your drinking water come from? How do you know if your drinking water is safe? How can you protect it? What can you do if there is a problem with your drinking water? To help answer these, and other questions, the EPA prepared Water on Tap: What You Need To Know (EPA 816-K-03-007, October 2003)

Drinking Water and Health: What You Need to Know
http://www.epa.gov/safewater/dwhealth.html
This website and accompanying brochure provide an overview of issues regarding safe drinking water, including: contaminants found in drinking water, sources of drinking water, treatment processes, the health effects of contaminated water, who is responsible for drinking water quality, drinking water standards, and what individuals and communities can do to protect their drinking water quality.

Consider The Source: A Pocket Guide to Protecting Your Drinking Water: Drinking Water Pocket Guide #3
http://www.epa.gov/safewater/protect/pdfs/swppocket.pdf
The Guide is a pocket-sized outreach and assistance publications designed to heighten public awareness of the importance of protecting source waters used for drinking water.   It includes a discussion of CWA- and SDWA-based regulatory and voluntary resources, tools, and management measures available to States and local governments and consumers, as well as accessible financing sources for enhancing existing protection programs and future plans. The Guide also includes discussions of integrating UIC program efforts with the Source Water Assessment and Protection Programs, milestones for completion of source water assessments and transitioning to protection, and available Best Management Practices for source water protection

areas.

Source Water Stewardship: A Guide to Protecting and Restoring Your Drinking Water
www.protectsourcewater.org/guide.html
The Clean Water Fund, Clean Water Network, and the Campaign for Safe and Affordable Drinking Water have partnered and are working with EPA to promote drinking water source protection. This handbook walks through a process for understanding recently completed assessments that provide information about the source of drinking water in your community, and includes a Quick Start Action List that will help you get involved with protecting and restoring your community's source of drinking water using the assessment.

2.5)   Land pollution and solid waste

RCRAInfo
http://www.epa.gov/epaoswer/hazwaste/data/#rcra-info
The RCRAInfo system allows tracking of many types of information about regulating hazardous waste handlers under Resource Conservation and Recovery Act (RCRA). RCRAInfo characterizes facility status, regulated activities, and compliance histories and captures detailed data on the generation of hazardous waste from large quantity generators and on waste management practices from treatment, storage, and disposal facilities. RCRAInfo data is made available to the public through EPA's Envirofacts Data Warehouse <http://www.epa.gov/enviro/html/rcris/.

2.6)   Pesticides

Human Health Pesticides Issues Website
http://www.epa.gov/pesticides/health/human.htm.
This website provides links to discussion of human health issues that are related to pesticide usage.

The National Pesticide Information Center (NPIC)
http://npic.orst.edu/
NPIC is a cooperative effort of Oregon State University and the EPA. It provides objective, science-based information about a variety of pesticide-related subjects, including pesticide products, recognition and management of pesticide poisonings, toxicology, and environmental chemistry. NPIC also lists state pesticide regulatory agencies, and provides links to their Websites.

2.7)   Additional chemical information

EPA's Office of Pollution Prevention and Toxics
http://www.epa.gov/opptintr/
OPPT's website promotes the use of safer chemicals, processes, and technologies; promotes complete management of environmental problems such as asbestos; advances pollution prevention through voluntary action by industry; and, promotes the public's right to know. There is information for a variety of audiences.
*   OPPT Publications by Chemical Type
        http://www.epa.gov/opptintr/chemtype.htm

This site hosts a variety of publications on asbestos, endocrine disruptors, fertilizers, lead, PBTs, and PCBs.
- ChemSTEER: A Software Tool for Screening Level Estimates of Environmental Release and Worker Exposure (Draft version)
  http://www.epa.gov/oppt/exposure/docs/chemsteer.htm
  The Chemical Screening Tool for Exposures and Environmental Releases is a software program using OPPT's Toxics most current workplace exposure and release assessment methods.
- Exposure Assessment Tools and Models - Screening Level Tools
  http://www.epa.gov/opptintr/exposure/docs/screen.htm
  This website provides a source for tools that are easy to use, fast and conservative. These tools are often used in the absence of appropriate monitoring data or to compliment exposure related data. They are designed to quickly "bin" chemicals by priority for future work and are commonly used in screening level risk assessments.
  - Estimation Program Interface Suite (EPI Suite),
  - Exposure, Fate Assessment Screening Tool (E-FAST),
  - Pesticide Inert Risk Assessment Tool (PIRAT), and
  - ReachScan.
  (Most are for a general audience; but some tools are fairly technical.)

Envirofacts Warehouse
http://intranet.epa.gov/enviro/index_java.htm
This website provides a single point of access to EPA's environmental data.

OPPT Community Assistance Program (CAP)
http://epa.gov/oppt/cahp/
This site provides information that may be useful to communities such as: information on chemicals and their effects, tools to help understand and use environmental data, programs and solutions to concerns about chemicals, grants to support community initiatives, forums for Tribes and Environmental Justice communities, and related Programs.

The High Production Volume Challenge Program
http://www.epa.gov/chemrtk/hpvrstp.htm and http://www.epa.gov/chemrtk/viewsrch.htm,
This Program is a "collaborative program designed to ensure that the American public has access to basic health and environmental effects data for those chemicals which are produced in the highest volumes in the United States." This site includes submissions (test plans, robust summaries of test data) to EPA related to the HPV Challenge Program for the purposes of making them more easily accessible to the public and inviting public comment on them.

Voluntary Children's Chemical Evaluation Program (VCCEP),
http://www.tera.org/peer/vccep/vccepintroduction.html
The VCCEP program is a voluntary pilot program and part of the U.S. Environmental Protection Agency's (EPA) Chemical Right-to-Know Initiative. This website provides data to enable the public to understand the potential health risks to children associated with certain chemical exposures. Companies collect and/or develop health effects and exposure information on their chemical(s) and integrate that information in a risk assessment. Toxicology Excellence for Risk Assessment (TERA) organizes and facilitates reviews of the information and forwards the results to EPA and the company(ies) concerning the adequacy of the assessments and the need for development of any additional information to fully assess risks to children. Communities interested in the latest available information and reports generated for the various chemicals under VCCEP can go to this site.

EPA's Office of Children's Health Protection
http://yosemite.epa.gov/ochp/ochpweb.nsf/content/whatwe.htm
This website leads you to information on potential environmental hazards where children live, learn, and play. It also links to health topics pertinent to children and tips to protect them.

Chemical Emergency Prepardness and Prevention Office Website
http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/index.html
US EPA website providing information on prevention and risk management planning, emergency planning and community right-to-know, and emergency response; includes a "Search Your Community" function

Protect Your Child from Lead Poisoning
http://www.epa.gov/lead/
This page provides families and caregivers with information on how to protect children from lead poisoning. This site provides extensive information on how to identify sources of lead exposure and steps families can take to protect children.

EPA Mercury website
http://www.epa.gov/mercury
Human activity can release mercury into the air, water and soil. In the U.S., coal-fired power plants are the biggest source of mercury emissions to the air. This website provides information on mercury effects, sources, and programs to reduce exposure. (general and technical audiences)

For technical audiences:

New Chemicals Program Websites
http://www.epa.gov/opptintr/newchems/index.htm. &
http://www.epa.gov/opptintr/newchems/process.htm
These websites describe the process EPA uses to evaluate new chemicals prior to their commercialization, of special interest is the Sustainable Futures initiative (http://www.epa.gov/opptintr/newchems/sustainablefutures.htm), which describes a voluntary program for chemical manufacturers that utilizes the Agency's "P2 Framework" risk screening models described at http://www.epa.gov/oppt/p2framework/. These models may also be useful on a chemical-by-chemical basis for the more technically-minded public.

2.8)   Noise and odors

The Centers for Disease Control's Noise Website (CDC)
http://www.cdc.gov/nceh/hsb/noise/
This website provides links to federal and other websites related to noise pollution and hearing loss.

Concentrated Animal Feeding Operations (CAFOs)
http://www.epa.gov/agriculture/anafobmp.html#Odors
This website provides valuable information on the sources and management of odors from raising large scale livestock production, such as hog, cattle, dairy, sheep, and poultry farms, that congregate animals, feed, waste, and production operations on a small land area.

Biosolids and Residuals Management Fact Sheet: Odor Control in Biosolids Management
http://www.epa.gov/owmitnet/mtb/odor_control-biosolids.pdf

This fact sheet provides information on the control of odors from biosolids production facilities, and the prevention of odors from the storage, distribution, and application of the biosolids product.

2.9)   Ecological Risk

EPA NCEA's Gateway to Ecological Risk Assessment
http://cfpub.epa.gov/ncea/cfm/ecologic.cfm
This site provides links to EPA documents discussing the development of guidelines, assessments, and methods that quantify risks to ecosystems from multiple stressors at multiple scales and multiple endpoints. Included in the website are links to:
- Guidance, such as EPA's Guidelines for Ecological Risk Assessment,
- Ecological Risk Assessment Methods, and
- Place-based Risk Assessments
- Guidelines for Ecological Risk Assessment
  http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=12460
  These Agency-wide guidelines are provided to improve the quality and consistency of EPA's ecological risk assessments.

Community Based Environmental Protection Tools
http://www.epa.gov/ecocommunity/tools.htm
This website consists of a list of resource tools for community-based environmental protection - ecosystem management. Different tools cover economics, human dimension, or integrated problem solving.

Characterizing Ecological Risks at the Watershed Scale
http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=23760
This report summarizes workshop discussions related to estimating, describing, presenting and communicating watershed scale ecological risks.

Watershed Ecological Risk Assessment
http://www.epa.gov/owow/watershed/wacademy/acad2000/ecorisk/
The Watershed Academy has incorporated a training module on watershed ecological risk assessment, developed by EPA's Office of Research and Development and the Office of Wetlands, Oceans and Watersheds. This on-line training module provides an interactive and colorful approach to learning about watershed ecological risk assessment.

Watershed Academy Web-Based Training – Distance Learning Modules: Watershed Ecology Modules
www.epa.gov/watertrain/
Watershed Academy web modules offer basic instruction on the many disciplines that make up watershed management. Modules run ½ to 2 hours each. These modules focusing on "Watershed Ecology," show watersheds as natural systems that provide substantial benefits to people and the environment when they are kept in good condition.

EPA's Air Toxics Risk Assessment Reference Library
http://www.epa.gov/ttn/fera/risk_atra_main.html
Volume 1: Technical Resource Manual. Volume 1 discusses the overall air toxics risk assessment process and the basic technical tools needed to perform these analyses. The manual, which covers both human health and ecological analysis, also provides a basic overview of risk

management and communication. This volume provides specific details on the use of risk assessment to evaluate the impacts of air toxics on ecological receptors.

Getting Started and Planning Your Analysis

Green Communities: Where Are We Now?
http://www.epa.gov/greenkit/wher_int.htm
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of what they want to be, developing a plan of action to get them there, and implementing that plan. This chapter answers the question "Where Are We Now?" and will enable you to "take stock" of your community's assets -- social, economic, and environmental. The resulting Community Assessment will provide a view of the present condition of your community. It will help identify what is working, what is not, what is highly valued, and what needs to be improved.

Green Communities: Where Are We Going?
http://epa.gov/greenkit/2intro.htm
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of what they want to be, developing a plan of action to get them there, and implementing that plan. And that "someplace else" may not be where you want to be. This Chapter provides tools and resources to answer the question "Where Are We Going". This chapter will help your community predict, based on current trends and activities, the direction you are headed. It allows community members to visualize their future if nothing is done to intervene. What can you expect if current patterns of land development, population change, natural resource consumption, and commercial and industrial activities continue?

Community-Based Environmental Protection: A Resource Book for Protecting Ecosystems and Communities – Chapter 3: Assessing the Conditions of Local Ecosystems and their Effects on Communities: Tools and Techniques
http://epa.gov/ecocommunity/pdf/fnlchap3.pdf
This document identifies practical approaches and tools to help communities carry out their own ecosystem protection efforts. Chapter Three specifically addresses techniques to assess ecosystem health, including the use of environmental indicators, and linkages between environmental and social indicators.

EPA Framework for Cumulative Risk Assessment
http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=54944
The Framework is an information document, focused on describing various aspects of cumulative risk. Building on EPA's growing experience with cumulative risk assessment, the Framework identifies the basic elements of the cumulative risk assessment process and provides a flexible structure for conducting and evaluating cumulative risk assessment, and for addressing scientific issues related to cumulative risk.

Community Air Screening How To Manual, A Step-by-Step Guide to Using a Risk-Based Approach to Identify Priorities for Improving Outdoor Air Quality
http://www.epa.gov/oppt/cahp/howto.html
This Manual provides a broad overview of outdoor air pollution and a step-by-step guide to help communities identify sources of outdoor air pollution, conduct a risk-based screening analysis to identify priorities, and develop recommendations for taking action to improve outdoor air quality

Environmental Justice Geographic Assessment Tool
http://www.epa.gov/enviro/ej/
This is a web based geographic assessment tool which incorporates basic environmental, health, social, and economic factors. Plans are being made to increase the number of indicators available, as well as to involve key stakeholders in evaluating the tool's effectiveness.

EPA's Air Toxics Community Assessment and Risk Reduction Projects Database
http://yosemite.epa.gov/oar/CommunityAssessment.nsf/Welcome?OpenForm
This database has been compiled to provide a resource of planned, completed, and ongoing community level air toxics assessments across the country. By sharing information about efforts at the local level to measure, understand, and address air toxics emissions, this database will help ensure that communities designing and implementing their own assessments will be able to build upon past efforts and lessons learned.

Evaluating Exposures to Toxic Air Pollutants: A Citizen's Guide
http://www.epa.gov/ttn/atw/3_90_023.html
This Citizen's Guide explains what an exposure assessment is and how to do an assessment in four steps.

Risky Business: An Overview of Risk Assessment and RCRA
http://www.epa.gov/epaoswer/osw/docs/riskfinal.pdf
This leaflet defines risk and discusses how risk assessment is used by EPA to analyze the potential for adverse human health or ecological effects due to the presence of toxic chemicals in the environment. Addresses how risks are assessed and describes how risk management is distinguished from risk assessment.

Watershed Academy Web-Based Training – Distance Learning Modules: Introduction to the Watershed Planning Process
www.epa.gov/watertrain/planning/
Watershed Academy web modules offer basic instruction on the many disciplines that make up watershed management. Modules run ½ to 2 hours each. This module introduces a flexible framework for watershed planning and points out key factors that help make planning successful.

Community-Based Environmental Protection: A Resource Book for Protecting Ecosystems and Communities
http://www.epa.gov/ecocommunity/tools/resourcebook.htm
This document identifies practical approaches and tools to help communities carry out their own ecosystem protection efforts. There is a chapter on assessing the conditions of local ecosystems and their effects on communities.

For technical audiences:

TRACI - Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts
http://www.epa.gov/ORD/NRMRL/std/sab/iam_traci.htm
The most effective way to achieve long-term environmental results is through the use of a consistent set of metrics and decision making framework. The EPA has developed TRACI, the Tool for the Reduction and Assessment of Chemical and other environmental Impacts, which allows the characterization of potential effects, including ozone depletion, global warming, acidification, eutrophication, photochemical smog, human health cancer, human health noncancer, human health criteria, ecotoxicity, fossil fuel use, land use, and water use.

Air Toxics Risk Assessment Reference Library, Volume 1, Chapters 5 and 6, Planning, Scoping, and Problem Formulation for an Air Toxics Inhalation Risk Assessment
 http://www.epa.gov/ttn/fera/risk_atra_vol1.html
This website provides detailed information on planning, scoping, and problem formulation for air toxics risk assessments. (Volume 1 also contains information for planning/scoping/problem formation for multimedia air toxics assessments and air toxics ecological risk assessments.)
• Volume 2 of this series http://www.epa.gov/ttn/fera/risk_atra_vol2.html similar information for source or facility-specific air toxics assessments.

Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities
http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm
This website contains information for better understanding the potential human health risks from combusting hazardous wastes. (General population)
• There is an companion site http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm which contains the screening level ecological risk assessment protocol for hazardous waste combustion facilities. (Technical)

Gathering and Evaluating Existing Information about Your Community

Toxics Release Inventory
http://www.epa.gov/tri/
The Toxics Release Inventory (TRI) is a publicly available EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. The information is technical, but useful for all audiences.

The Envirofacts Data Warehouse
http://www.epa.gov/enviro/index_java.html
Envirofacts provides direct access to the information contained in EPA's databases. Envirofacts allows the public to retrieve data from many of the Agency data systems, develop online queries, create reports, and map results.

Risk Screening Environmental Indicators (RSEI) Software
http://www.epa.gov/opptintr/rsei/
RSEI is a screening tool that compares toxic chemicals released to the environment from industrial sources using Toxics Release Inventory data. You can examine rankings and trends, and set priorities for further action. Information can be sorted in numerous ways such as by chemical, media, geographic areas, etc.

EPA Enviromapper
 http://map3.epa.gov/enviromapper/
EnviroMapper, lists Superfund sites on the National Priority List (NPL), rivers, watershed, streets, schools and other information. Select a geographic area within EnviroMapper and view the different facilities that are present within that area. Create maps at the national, state, and county levels, and link them to environmental text reports.

Window to My Environment
http://www.epa.gov/enviro/wme/
This website allows users to easily access comprehensive information about air, land, and water by entering a zip code. The "window" integrates environmental data with local geographical features by pulling together information from several EPA databases.

Watershed Atlas
http://www.epa.gov/wateratlas/
The Watershed Atlas is a catalog of geo-spatial displays and analyses of information and data important for watershed protection and restoration. You can use the catalog by geography, theme, key word, source/organization, and age of source data (under construction). Or search it using your words.

Watershed Information Network: Environmental Data and Maps
http://www.epa.gov/win/datamap.html
The Watershed Information Network (WIN) functions as a hub for watershed-related and maps.

AirNow
www.epa.gov/airnow
EPA, together with state and local governments, has expanded air quality forecasting to include year-round, daily information on particle pollution. "Particle pollution" consists of microscopic particles in the air that can get deep into the lungs, potentially causing serious health problems. Unlike summertime ozone, particle pollution can occur throughout the year. Although particle levels aren't high every day, you should check your Air Quality Index (AQI) forecasts to determine whether you need to take action to reduce your exposure. Forecasts, health information, and maps showing real-time particle levels are available.

National Air Toxics Assessment (NATA) website
http://www.epa.gov/ttn/atw/nata/index.html
NATA is EPA's ongoing comprehensive evaluation of the status of air toxics in the U.S. NATA activities include: expansion of air toxics monitoring; improved and updated emission inventories (every three years starting from the year of 1996); improved national- and local-scale modeling and assessment tools; and continued research on health effects and exposures to both ambient and indoor air. The goal of NATA is to identify those air toxics which are of greatest potential concern, in terms of contribution to population risk. NATA data can be used to set priorities for the collection of additional air toxics data (e.g., emissions data and ambient monitoring data) or for targeting emission reduction efforts. There are various types of information presented for different audiences.

EPA AirData Website
http://www.epa.gov/air/data/
The AirData Website gives you access to air pollution data for the entire United States. Want to know the highest ozone level measured in your state last year? Ever wonder where air pollution monitoring sites are located? Are there sources of air pollution in your town? You can find out here! AirData produces reports and maps of air pollution data based on criteria that you specify.

For technical audiences:

EPA's Office of Compliance and Enforcement's Multimedia Data Systems and Tools
http://www.epa.gov/compliance/planning/data/multimedia/index.html

The website offers systems and tools that provide enforcement and compliance data. The tools listed on this site are suitable for a technical audience. Some of the tools offer more general information, such as facility information.

- Enforcement and Compliance History Online (ECHO)
  http://www.epa.gov/compliance/planning/data/multimedia/echo.html
  ECHO is a Web-based tool that provides public access to compliance and enforcement information for approximately 800,000 EPA-regulated facilities.

Frequently Asked Questions About Atmospheric Deposition: A Handbook for Watershed Managers
http://www.epa.gov/oar/oaqps/gr8water/handbook/index.html
The purpose of this handbook is to provide information about what atmospheric deposition is, how it can be measured, and how the significance of the problem may be determined for a particular area. This publication was originally written for watershed manages, but contains useful information on how air pollutants can affect aquatic systems that could be useful for a variety of audiences.

Air Facility Subsystem (AFS)
http://www.epa.gov/compliance/planning/data/air/afssystem.html
The EPA AFS contains compliance and permit data for stationary sources regulated by the EPA and state and local government agencies to track permit data. Examples of the types of data that can be obtained includes plant-level data such as plant name, address, SIC, NAICS, stack parameters; and emission point and segment-level data

Air Toxics Risk Assessment Reference Library, Volume 1, Chapter 4, Air Toxics: Chemicals, Sources, and Emissions Inventories
http://www.epa.gov/ttn/fera/data/risk/vol_1/chapter_04.pdf
This website provides a broad overview of air toxics, their sources (including outdoor stationary, indoor, and mobile sources), and available inventories of emissions.

Technology Transfer Network Clearinghouse for Inventories & Emission Factors (CHIEF)
http://www.epa.gov/ttn/chief/
Provides access to the EPA's National Emissions Inventory (NEI), a national database of air emissions information with input from numerous State and local air agencies, from tribes, and from industry.

What Are the Major Tools You Can Use to Evaluate the Potential Health Impacts of Pollution?

2.10)   Introduction to risk assessment

EPA's Technology Transfer Network – Air Toxics Website
http://www.epa.gov/ttn/atw/
- Air Pollution and Health Risk
  http://www.epa.gov/ttn/atw/3_90_022.html
  The information from this site answers these questions: How do we know when a risk is serious? How do researchers estimate risk, and how does the government use this information to develop regulations that limit our exposure to hazardous substances?

- Risk Assessment for Toxic Air Pollutants: A Citizen's Guide
  http://www.epa.gov/ttn/atw/3_90_024.html
  Risk assessment is one tool used in risk management. It is the process that scientists and government officials use to estimate the increased risk of health problems in people who are exposed to different amounts of toxic substances. A risk assessment for a toxic air pollutant combines results of studies on the health effects of various animal and human exposures to the pollutant with results of studies that estimate the level of human's exposures at different distances from the source of the pollutant.

Air Pollution Training Institute Introduction to Air Toxics Risk Assessment Web-based Course http://www.epa.gov/air/oaqps/eog/course/index.html

This self-study computer-based training course contains 11 highly interactive modules containing simulations, animation, and graphics (each module is approximately 30-45 minutes in length). Upon completion of this training, students will have a basic understanding of air pollution toxicology, epidemiology, and risk assessment and risk management.

National Air Toxics Assessment (NATA) website
http://www.epa.gov/ttn/atw/nata/index.html

NATA is EPA's ongoing comprehensive evaluation of the status of air toxics in the U.S. NATA activities include: expansion of air toxics monitoring; improved and updated emission inventories (every three years starting from the year of 1996); improved national- and local-scale modeling and assessment tools; and continued research on health effects and exposures to both ambient and indoor air. The goal of NATA is to identify those air toxics which are of greatest potential concern, in terms of contribution to population risk. NATA data can be used to set priorities for the collection of additional air toxics data (e.g., emissions data and ambient monitoring data) or for targeting emission reduction efforts. There are various types of information presented for different audiences.

For technical audiences:

EPA's Fate, Exposure, and Risk Analysis (FERA) website
 www.epa.gov/ttn/fera

The tools found on this website, which include EPA's Total Risk Integrated Methodology, will assist with the EPA's efforts to evaluate the health risks and environmental effects associated with exposure to "criteria" (six common air pollutants including ozone and particles) and toxic air pollutants.

EPA Exposure Factors Handbook (Final) Volumes I, II, III.
 http://cfpub.epa.gov/ncea/cfm/exposfac.cfm

The Exposure Factors Handbook provides a summary of the available statistical data on various factors used in assessing human exposure. Recommended values are for the general population and also for various segments of the population who may have characteristics different from the general population.

- Child-specific Exposure Factors Handbook (Interim Report)
  http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=55145
  The goal of the Child-Specific Exposure Factors Handbook is to consolidate all children exposure data into one document The document provides a summary of the available and up-to-date statistical data on various factors assessing children exposures.

EPA's Risk Assessment Guidelines

http://cfpub.epa.gov/ncea/raf/recordisplay.cfm?deid=55907

The Guidelines series sets forth recommended principles and procedures to guide EPA scientists in assessing the risks from chemicals or other agents in the environment. They also inform EPA decision makers and the public about these procedures. EPA published an initial set of five risk assessment guidelines (relating to cancer, mutagenic effects, developmental effects, exposure assessment, and chemical mixtures) in 1986 as recommended by the National Academy of Sciences. EPA continues to revise its risk assessment guidelines and to develop new guidelines as experience and scientific understanding evolve. The current guidelines are listed below. All of these documents are available through the link provided above.

- Guidelines for Carcinogen Risk Assessment
  2003 draft guidelines (including draft supplemental guidance for early life exposure), previous drafts, and 1986 guidelines
- Guidelines for Chemical Mixtures Risk Assessment
  2000 supplementary guidance and 1986 guidelines,
  Federal Register 51 (185) 34014-34025, 24 September 1986
- Guidelines for Ecological Risk Assessment
  Federal Register 63 (93) 26846-26924, 14 May 1998
- Guidelines for Neurotoxicity Risk Assessment
  Federal Register 63 (93) 26926-26954, 14 May 1998
- Guidelines for Reproductive Toxicity Risk Assessment
  Federal Register 61 (212) 56274-56322, 31 October 1996
- Guidelines for Exposure Assessment
  Federal Register 57 (104) 22888-22938, 29 May 1992
- Guidelines for Developmental Toxicity Risk Assessment
  Federal Register 56 (234) 63798-63826, 5 December 1991
- Guidelines for Mutagenicity Risk Assessment
  Federal Register 51 (185) 34006-34012, 24 September 1986

EPA's National Center for Environmental Assessment

http://cfpub.epa.gov/ncea/

NCEA is EPA's national resource center for human health and ecological risk assessment. NCEA conducts risk assessments, carries out research to improve the state-of-the-science of risk assessment, and provides guidance and support to risk assessors. The information on this site is highly technical and best suited for environmental researchers.

- NCEA Publication Topics
  http://cfpub.epa.gov/ncea/cfm/nceapubtopics.cfm?ActType=PublicationTopics
  Lists all of NCEA's documents in alphabetical order.
- IRIS Integrated Risk Information System (IRIS)
  http://www.epa.gov/ngispgm3/iris/index.html
  IRIS is a database of human health effects that may result from exposure to various substances found in the environment. Data, analysis, and uncertainty characterizations are provided for hundreds of common chemicals.

Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (CDC)

http://www.atsdr.cdc.gov/mrls.html

Minimum Risk Levels (MRL) is an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse noncancer health effects over a specified duration of exposure. These substance-specific estimates, which are intended to serve as screening levels, are used by ATSDR health assessors and other responders to identify contaminants and potential health effects that may be of concern at hazardous waste sites.

National Library of Medicine, Toxicology and Environmental Health Information
http://sis.nlm.nih.gov/Tox/ToxMain.html
TEHIP creates, organizes, and disseminates toxicology and environmental health information. Its objectives are to create automated toxicology data banks, provide toxicology information and data services. (environmental professionals)

EPA's Air Toxics Risk Assessment Reference Library
http://www.epa.gov/ttn/fera/risk_atra_main.html
EPA's air toxics risk assessment (ATRA) three volume library provides information on the fundamental principles of risk-based assessment for air toxics and how to apply those principles in different settings as well as strategies for reducing risk at the local level. Volumes 1 and 2 are completed and are available through the link provided above. Volume 3 is currently being developed and is expected to be available by the end of 2004. A more detailed description of each volume of the ATRA library is provided below.
- *Volume 1: Technical Resource Manual*
  Volume 1 discusses the overall air toxics risk assessment process and the basic technical tools needed to perform these analyses. The manual, which covers both human health and ecological analysis, also provides a basic overview of risk management and communication. Other tools (such as the public health assessment process) are described to give assessors, risk managers, and other stakeholders a more holistic understanding of the many issues that may come into play during air toxics risk assessment and reduction projects.
- *Volume 2: Facility-Specific Assessment*
  Volume 2 builds on the technical tools described in Volume 1 by providing detailed procedures for source-specific or facility-specific risk assessments. Information is also provided on tiered approaches to source- or facility-specific risk analysis.

Risk Assessment Guidance for Superfund (RAGS) Part A
http://www.epa.gov/superfund/programs/risk/ragsa/index.htm
RAGS Part A provides guidance on the human health evaluation activities that are conducted during a site specific baseline risk assessment of a contaminated site. The baseline risk assessment is an analysis of the potential adverse health effects (current or future) caused by hazardous substance releases from a site in the absence of any actions to control or mitigate these releases. The results of the baseline risk assessment are used to help determine whether additional response action is necessary at the site, modify preliminary remediation goals, help support selection of the "no- action" remedial alternative, where appropriate, and document the magnitude of risk at a site, and the primary causes of that risk. (environmental professionals)
- Risk Assessment Guidance for Superfund (RAGS)
  Volume III - Part A, Process for Conducting Probabilistic Risk Assessment (2001)
  http://www.epa.gov/superfund/programs/risk/rags3a/index.htm
  Risk Assessment Guidance for Superfund Volume III: Part A (RAGS: Volume 3A) provides policies and guiding principles on the application of probabilistic risk assessment (PRA) methods to human health and ecological risk assessment in the EPA Superfund program. Volume 3A supplements existing human health and ecological assessment guidance provided in the RAGS series. (environmental professionals)

2.11)   Calculating Exposures and Risks

Integrated Risk Information System (IRIS) Database
http://www.epa.gov/iris/index.html

IRIS is a database of human health effects that may result from exposure to various substances found in the environment. It was initially developed for EPA staff in response to a growing demand for consistent information on chemical substances for use in risk assessments, decision-making, and regulatory activities. (Non-expert but with some knowledge of health science)

Office of Pollution Prevention and Toxics: Persistent Bioaccumulative and Toxic (PBT) Chemical Program website
http://www.epa.gov/oppt/pbt/
EPA is forging a new approach to reduce risks from and exposures to priority PBT chemicals. This program has been established to overcome the remaining challenges in addressing priority PBT pollutants. There are various types of information presented for different audiences.
*   The P2 Assessment Framework Models
    http://www.epa.gov/oppt/p2framework/docs/p2model.htm/
    The P2 Framework Project presents models to industry to be useful in identifying potential problem chemicals and processes early in the research and development (R&D) process.

Smart Growth Index
http://www.epa.gov/smartgrowth/topics/sg_index.htm
The Smart Growth Index (SGI) is a GIS sketch model for simulating alternative land-use and transportation scenarios, and evaluating their outcomes using indicators of environmental performance.

Watershed Academy Web-Based Training – Distance Learning Modules: Watershed Modeling
http://www.epa.gov/watertrain/modeling/
Watershed Academy web modules offer basic instruction on the many disciplines that make up watershed management. Modules run ½ to 2 hours each. This module should help you to: 1) Understand when and how modeling can contribute to watershed assessment; 2) Learn approaches and tools that are useful for watershed modeling. Note that the requirements of watershed assessment can necessitate different tools and approaches from a traditional point source modeling problem; and, 3) Understand the considerations in choosing models for watershed assessments.

For technical audiences:

EPA's Fate, Exposure, and Risk Analysis (FERA) website
www.epa.gov/ttn/fera
The tools found on this website, which include EPA's Total Risk Integrated Methodology, will assist with the EPA's efforts to evaluate the health risks and environmental effects associated with exposure to "criteria" (six common air pollutants including ozone and particles) and toxic air pollutants.

Modeling Tools Symposium
http://www.epa.gov/region5/air/toxics/modeling.htm
The purpose of the symposium was to inform regional, state, and local modelers and risk assessors about the wide range of modeling tools available for use in local, community, and regional-scale risk assessments. (environmental professionals)

EPA Supplementary Guidance for Conducting Health Risk Assessment of

Chemical Mixtures
http://cfpub.epa.gov/ncea/raf/recordisplay.cfm?deid=20533
This document is a supplement to EPA Guidelines for the Health Risk Assessment of Chemical Mixtures of 1986. This supplementary guidance puts forth the risk assessment paradigm for mixtures. This paradigm begins with problem formulation, then briefly discusses hazard identification, dose-response assessment, exposure, and risk characterization. The appendices contain definitions, a discussion on toxicologic interactions and pharmacokinetic models, and a reprint of the 1986 Guidelines. (risk assessors)

Office of Pollution Prevention and Toxics Exposure Assessment Tools and Models website
http://www.epa.gov/oppt/exposure
The website contains several exposure assessment methods, databases, and predictive models to help in evaluating what happens to chemicals when they are used and released to the environment; and how workers, the general public, consumers, and the aquatic ecosystems may be exposed to chemicals. (environmental professionals)

EPA's Air Toxics Risk Assessment Reference Library
http://www.epa.gov/ttn/fera/risk_atra_main.html
EPA's air toxics risk assessment (ATRA) three volume library provides information on the fundamental principles of risk-based assessment for air toxics and how to apply those principles in different settings as well as strategies for reducing risk at the local level. Volumes 1 and 2 are completed and are available through the link provided above. Volume 3 is currently being developed and is expected to be available by the end of 2004. A more detailed description of each volume of the ATRA library is provided below.
- *Volume 1: Technical Resource Manual*
  Volume 1 discusses the overall air toxics risk assessment process and the basic technical tools needed to perform these analyses. The manual, which covers both human health and ecological analysis, also provides a basic overview of risk management and communication. Other tools (such as the public health assessment process) are described to give assessors, risk managers, and other stakeholders a more holistic understanding of the many issues that may come into play during air toxics risk assessment and reduction projects.
- *Volume 2: Facility-Specific Assessment*
  Volume 2 builds on the technical tools described in Volume 1 by providing detailed procedures for source-specific or facility-specific risk assessments. Information is also provided on tiered approaches to source- or facility-specific risk analysis.

Methods for Assessing Mobile Source Air Toxics
http://www.epa.gov/OMSWWW/toxics.htm#assess
This website provides links to a variety of topics related to the assessment of toxic air pollutants emitted from onroad (e.g. on-highway vehicles) and nonroad mobile sources (e.g. aircraft, commercial marine vessels, and locomotives). There are examples of community-based air toxics assessment and risk reduction projects. Information provided via this website is suitable for technical audience. (Suitable for technical audiences.)

OAQPS Technology Transfer Network, Support Center for Regulatory Models (SCRAM)
http://www.epa.gov/ttn/scram/
 It is a source of information on atmospheric dispersion (air quality) models (including ISCST3, SCREEN 3, and ASPEN) that support regulatory programs required by the Clean Air Act.

Documentation and guidance for these computerized models are a major feature of this website. This site also contains computer code, data (meteorological data), and technical documents that deal with mathematical modeling for the dispersion of air pollutants. (environmental professionals)

Landfill Gas Emissions Model (LandGEM)
http://www.epa.gov/ord/WebPubs/landfill/index.html
The Landfill Gas Emissions Model (LandGEM) is a tool for estimating gaseous emissions from landfills including HAPs, VOCs, methane, and CO2. (technical audience with some familiarity with modeling procedures)

OAQPS Recommended Dose Response Value Table
http://www.epa.gov/ttn/atw/toxsource/summary.html
This is a database of recommended dose-response values for use in air toxics risk assessment. It presents a compilation of acute and chronic health benchmarks from various sources such as IRIS, CalEPA, and ATSDR.

RISK V 1.9 Model
http://www.epa.gov/appcdwww/iemb/model.htm
RISK is a multi-zone, multi-pollutant model for calculating individual exposure to indoor air pollutants. (technical audience with some familiarity with modeling procedures)

2.12)   Comparative risk analysis and other risk ranking techniques

EPA's Comparative Risk Analysis Website
http://www.epa.gov/seahome/comprisk.html
Comparative risk assessment is a methodology which uses sound science, policy, economic analysis and stakeholder participation to identify and address the areas of greatest environmental risks and provide a framework for prioritizing environmental problems. The results of a comparative risk analysis can be used to provide a technical basis for targeting activities, management priorities and resources. The program provided on this website contains the history and methodology of comparative risk, as well as many case studies and information.

Risk Screening Environmental Indicators (RSEI) Software
http://www.epa.gov/opptintr/rsei/
RSEI is a screening tool that compares toxic chemicals released to the environment from industrial sources using Toxics Release Inventory data. You can examine rankings and trends, and set priorities for further action. Information can be sorted in numerous ways such as by chemical, media, geographic areas, etc.

National Air Toxics Assessment (NATA) website
http://www.epa.gov/ttn/atw/nata/index.html
NATA is EPA's ongoing comprehensive evaluation of the status of air toxics in the U.S. NATA activities include: expansion of air toxics monitoring; improved and updated emission inventories (every three years starting from the year of 1996); improved national- and local-scale modeling and assessment tools; and continued research on health effects and exposures to both ambient and indoor air. The goal of NATA is to identify those air toxics which are of greatest potential concern, in terms of contribution to population risk. NATA data can be used to set priorities for the collection of additional air toxics data (e.g., emissions data and ambient monitoring data) or for targeting emission reduction efforts. There are various types of

information presented for different audiences.

Community Air Screening How To Manual, A Step-by-Step Guide to Using a Risk-Based Approach to Identify Priorities for Improving Outdoor Air Quality
http://www.epa.gov/oppt/cahp/howto.html

This Manual provides a broad overview of outdoor air pollution and a step-by-step guide to help communities identify sources of outdoor air pollution, conduct a risk-based screening analysis to identify priorities, and develop recommendations for taking action to improve outdoor air quality.

2.13)   Epidemiology and medical information

ATSDR Public Health Assessment Manual Draft
http://www.atsdr.cdc.gov/HAC/PHAManual/foreword.html

ATSDR has developed a method to evaluate the public health implications of exposures to environmental contamination. This method is called the public health assessment process. The public health assessment process serves as a triage mechanism for identifying appropriate public health actions for particular communities. The purpose of the process is to find out whether people have been or are being exposed to hazardous substances and, if so, whether that exposure is harmful, or potentially harmful, and should therefore be stopped or reduced. The process also serves as a mechanism through which the agency responds to specific community health concerns.

National Library of Medicine
http://www.nlm.nih.gov/

The National Library of Medicine (NLM) is the world's largest medical library. The Library collects materials and provides information and research services in all areas of biomedicine and health care. The library provides a wide array of information through the internet, including information on hazardous chemicals and their effects on human health.

For technical audiences:

EPI Info
http://www.cdc.gov/epiinfo/

Using the Epi Info™ model and a personal computer, epidemiologists and other public health and medical professionals can rapidly develop a questionnaire or form, customize the data entry process, and enter and analyze data. The model produces epidemiologic statistics, tables, graphs, and maps.

What If You Want to Collect New Information about Pollution in Your Community?

2.14)   Developing an inventory of pollution sources

EPA's Air Toxics Risk Assessment Reference Library
http://www.epa.gov/ttn/fera/risk_atra_main.html

Volume 1: Technical Resource Manual. Volume 1 discusses the overall air toxics risk assessment process and the basic technical tools needed to perform these analyses. The manual, which covers both human health and ecological analysis, also provides a basic overview of risk management and communication. This volume provides specific details on developing an inventory of emissions sources of air toxics in a particular place.

Technology Transfer Network Clearinghouse for Inventories & Emission Factors (CHIEF)
http://www.epa.gov/ttn/chief/
Provides access to the EPA's National Emissions Inventory (NEI), a national database of air emissions information with input from numerous State and local air agencies, from tribes, and from industry. This website also provides information on how to develop an emissions inventory for both air toxics and criteria pollutants.

Community Air Screening How To Manual, A Step-by-Step Guide to Using a Risk-Based Approach to Identify Priorities for Improving Outdoor Air Quality
http://www.epa.gov/oppt/cahp/howto.html
This Manual provides a broad overview of outdoor air pollution and a step-by-step guide to help communities identify sources of outdoor air pollution, conduct a risk-based screening analysis to identify priorities, and develop recommendations for taking action to improve outdoor air quality.

Home*A*Syst/Farm*A*Syst
http://www.uwex.edu/homeasyst/
Home*A*Syst/Farm*A*Syst are national programs cooperatively supported by the USDA Cooperative State Research, Education and Extension Service (CSREES), USDA Natural Resources Conservation Service (NRCS), and EPA. The programs are partnerships between government agencies and private business that enable you to prevent pollution on farms, ranches, and in homes using confidential environmental assessments. All information you gather is confidential. You decide what changes you need to make and when to make them.

2.15) Monitoring pollutants in your environment

Watershed Academy Web-Based Training – Distance Learning Modules: Overview of Watershed Monitoring
http://www.epa.gov/watertrain/monitoring/
Watershed Academy web modules offer basic instruction on the many disciplines that make up watershed management. Modules run ½ to 2 hours each. This module serves as a general introduction to monitoring - what it is, why it is needed, and how it can be used to help achieve watershed management objectives.

Monitoring and Assessing Water Quality: Biological Assessment
http://www.epa.gov/owow/monitoring/bioassess.html
Biological assessments are evaluations of the condition of waterbodies using surveys and other direct measurements of resident biological organisms (macroinvertebrates, fish, and plants). Biological assessment results are used to answer the question of whether waterbodies support survival and reproduction of desirable fish, shellfish, and other aquatic species -- in other words, if the waterbodies meet their designated aquatic life uses.

Starting Out in Volunteer Water Monitoring
http://www.epa.gov/owow/monitoring/volunteer/startmon.html
This website describes the process of starting out in volunteer monitoring.

EPA's Volunteer (Water) Monitoring Program
http://www.epa.gov/owow/monitoring/volunteer/epasvmp.html
EPA's Office of Water encourages all citizens to learn about their water resources and supports volunteer monitoring because of its many benefits. This website provides information on EPA's

Volunteer (Water) Monitoring Program. It also provides links to a variety of guidance document and manuals on how to conduct volunteer monitoring of estuary, lakes, and wetlands.

For technical audiences:

Ambient Monitoring Technology Information Center
http://www.epa.gov/ttn/amtic/
The Ambient Monitoring Technology Information Center contains information and files on ambient air quality monitoring programs, details on monitoring methods, relevant documents and articles, information on air quality trends and nonattainment areas, and federal regulations related to ambient air quality monitoring. (environmental professionals)

Air Quality System (AQS)
http://www.epa.gov/ttn/airs/airsaqs/index.htm
The Air Quality System (AQS) contains ambient air pollution data collected by EPA, state, local, and tribal air pollution control agencies from thousands of monitoring stations. AQS also contains meteorological data, descriptive information about each monitoring station (including its geographic location and its operator), and data quality assurance/quality control information. (environmental professionals)

EPA's Air Toxics Risk Assessment Reference Library
http://www.epa.gov/ttn/fera/risk_atra_main.html
Volume 1: Technical Resource Manual. Volume 1 discusses the overall air toxics risk assessment process and the basic technical tools needed to perform these analyses. The manual, which covers both human health and ecological analysis, also provides a basic overview of risk management and communication. This volume provides specific details on the use of monitoring to evaluate air toxics in air and, for certain chemicals, once they have deposited out of the air and begin moving into other environmental media and human food.

Communicating Information about Risk (Risk Communication)

"A Primer on Health Risk Communication Principles and Practices" Agency for Toxic Substances and Disease Registry(ATSDR)
http://www.atsdr.cdc.gov/HEC/primer.html
The purpose of this Primer is to provide a framework of principles and approaches for the communications of health risk information to diverse audiences. It is intended for ATSDR staff and personnel from other government agencies and private organizations who must respond to public concerns about exposure to hazardous substances in the environment. (Environmental professionals)

PART III - Methods to Reduce Your Exposure

The next step in the process of reducing risks in your community is to decide what action to take. This part lists many resources that explain different programs or tools you can use to reduce risk. They are divided by the type of environmental problem - air water -waste, etc..

What Kind of Things Can Be Done to Reduce Environmental Risks

3.1)   Reducing risks by improving air quality

What You Can Do to Clean the Air
http://www.epa.gov/air/actions/index.html
This website provides information on how you can help to clean the air through activities at homes, and how you can buy smart, drive wise, and get informed.

Office of Transportation and Air Quality's Consumer Information
http://www.epa.gov/otaq/consumer.htm
This website provides information on what consumers can do to reduce mobile source air toxics emissions. It also provides links to a variety of fact sheets on pollutants from mobile source emissions and key topics related to transportation and air quality.

Notebook on Local Urban Air Toxics Assessment and Reduction Strategies
http://www.epa.gov/ttn/atw/wks/notebook.html
An online notebook of fact sheets and presentations covering a variety of topics including: funding information, community involvement, tool kits, and reduction strategies. See Section III. Improving Air Quality.

Diesel Exhaust and School Bus Idling
http://www.epa.gov/otaq/retrofit/documents/f03005.pdf
Anti-idling policies are a cost-effective, common sense way to reduce diesel pollution, and they are easy to implement. By reducing the amount of time that buses idle, school bus fleets will use less fuel, save money, and help clean the air.

Voluntary Diesel Retrofit Program
http://www.epa.gov/otaq/retrofit
The Diesel Retrofit Program works to reduce pollution resulting from existing diesel vehicles and equipment by encouraging fleet owners to install pollution-reducing devices on the vehicles and to use cleaner-burning diesel fuel. This involves working with state, local, and industry partners to verify the effectiveness of pollution-reducing technology and to create retrofit projects around the country.

Clean School Bus USA
http://www.epa.gov/cleanschoolbus
A new national partnership to minimize pollution from school buses. Leaders from corporate America, children's health, environmental and governmental organizations gather to design a plan to reduce children's exposure to diesel exhaust by eliminating unnecessary school bus idling, installing effective emission control systems on newer buses and replacing the oldest buses in the fleet with newer ones. Anti-idling policies are a cost-effective, common sense way to reduce diesel pollution, and they are easy to implement. By reducing the amount of time that buses idle, school bus fleets will use less fuel, save money, and help clean the air.

EPA Guidance: Improving Air Quality Through Land Use Activities
http://www.epa.gov/otaq/transp/trancont/r01001.pdf
EPA 420-R-01-001. 2001.
This guidance presents the conditions under which the benefits of land use activities could be

included in air quality and transportation planning processes. The EPA intends that this guidance be an additional tool to encourage the development of land use policies and projects which improve livability in general, and air quality in particular.

Best Work Places for Commuters
http://www.bestworkplacesforcommuters.gov
Best Workplaces for Commuters is a new business/government voluntary initiative that offers innovative solutions to commuting challenges faced by employers and employees. Established by the EPA and the U.S. Department of Transportation (DOT), this program assists (and publicly recognizes) companies to provide commuter benefits to their employees. Such measures can alleviate limited or expensive parking, reduce traffic congestion, improve employee recruiting and retention, and minimize the environmental impacts associated with drive-alone commuting. Participating companies earn the designation "Best Work Places for Commuters"- a mark of excellence for environmentally and employee-friendly organizations.

What You Can Do
http://www.epa.gov/otaq/consumer.htm#youdo
Tips for consumers on driving patterns and maintenance that will reduce pollution from their vehicles.

SAGE -Solvent Alternatives Guide
http://clean.rti.org
The SAGE system is a PC based expert system that recommends surface cleaning alternatives. The recommended alternatives are characterized by their potential to reduce the discharges of toxic, hazardous, volatile, and ozone depleting pollutants into the atmosphere. The site was developed by the Research Triangle Institute in cooperation with EPA. SAGE provided accurate, easily understood information on low polluting surface cleaning processes that meet EPA, state and local agency emission requirements. It is presently receives more than 5,000 inquires per month and has been used by some university academic programs as a teaching aid.

Taking Toxics Out of the Air
http://www.epa.gov/oar/oaqps/takingtoxics/
Describes steps taken by EPA to reduce air toxics from industrial sources such as chemical plants, steel mills, and petroleum refineries.

For technical audiences:

Air Pollution Control Technology Series Training Tool
http://www.epa.gov/ttn/atw/utrain.html
The Control Technology Series is a self instructional training tool that is designed to provide a basic overview to those unfamiliar with a variety of air pollution control technologies. The series is broken down into different types of equipment such as: wet scrubbers, carbon absorption, incineration, condensation, and electrostatic precipitators. (environmental professionals)

The Coatings Guide
http://cage.rti.org
The Coatings Guide is a free Internet pollution prevention tool designed to help small-business coaters of metal, plastic, and architectural substrates identify low-emitting coating alternatives as potential drop-in replacements for existing operations. The site was developed by the Research Triangle Institute in cooperation with EPA. Communities can use the Coatings Guide provide technical assistance to local businesses both to reduce their environmental impacts and to improve their operations.

3.2)   Reducing risks in homes and schools

Smoke-free Homes Program
http://www.epa.gov/smokefree
EPA's Smoke-free Homes website contains many free resources including brochures, kits, videos, customizable tools and outreach guides to help communities promote smoke-free homes. Key resources include the Smoke-Free Home Pledge Brochure and Kit, the Smoke-free Homes: Planning Guide for Pledge Events, and the Secondhand Smoke Community Action Kit (CD ROM). The website also contains useful information on health effects, public service campaigns, web links to additional organizations, and science resources. In addition, Smoke-free Home pledges can be made online simply using zip codes.

Indoor Air Quality Tools for Schools Kit
http://www.epa.gov/iaq/schools/toolkit.html
The Indoor Air Quality (IAQ) Tools for Schools Kit (with HTML and PDF versions on this website) includes checklists for all school employees, a flexible step-by-step guide for coordinating the checklists, an Indoor Air Quality Problem Solving Wheel, a fact-sheet on indoor air pollution issues, and sample policies and memos. The kit shows schools how to carry out a practical plan of action to improve indoor air problems at little or no cost using straightforward activities and in-house staff, the hands-on recommendations for schools are to reduce toxic materials on site.

Household Hazardous Wastes
http://www.epa.gov/epaoswer/non-hw/househld/hhw.htm
This website contains information on how to safely handle products around the home that may contain hazardous components. Such products may include certain paints, cleaners, stains and varnishes, car batteries, motor oil, and pesticides. The used of leftover contents of such consumer products are known as "household hazardous waste."

Home*A*Syst/Farm*A*Syst
http://www.uwex.edu/homeasyst/
Home*A*Syst/Farm*A*Syst are national programs cooperatively supported by the USDA

Cooperative State Research, Education and Extension Service (CSREES), USDA Natural Resources Conservation Service (NRCS), and U.S. Environmental Protection Agency (EPA). The programs are partnerships between government agencies and private business that enable you to prevent pollution on farms, ranches, and in homes using confidential environmental assessments. All information you gather is confidential. You decide what changes you need to make and when to make them.

10 Tips to Protect Children from Pesticide and Lead Poisonings
http://www.epa.gov/oppfead1/cb/10_tips/index.html.
This publication addresses steps consumers can take to save children from environmental hazards around the home.

Citizens Guide to Pest Control and Pesticide Safety
http://www.epa.gov/oppfead1/Publications/Cit_Guide/citguide.pdf
This is a publication designed to help consumers understand what steps to take to control pests in and around the home. It also addresses alternatives to chemical pesticides, including pest prevention and non-chemical pest controls. The idea here is that consumers should be able to control pests without risking their family's health or harming the environment.

Planet Protectors Club
http://www.epa.gov/epaoswer/education/kids_ppc.htm
The Planet Protectors Club activity booklets and games to encourage kids to reduce, reuse, and recycle waste.

The Power of Change: Protecting the Environment for the Next Generation
http://www.epa.gov/epaoswer/aging/
The "Power of Change" campaign teaches older Americans what they can do to help reduce waste and protect the environment for the next generation. This website offers a free kit of resources that explain how to reduce waste, conserve our natural resources, and save energy.

Indoor Air Quality Design Tools for Schools
http://www.epa.gov/iaq/schooldesign/
Design Tools for Schools is a website that provides detailed guidance as well as links to other information resources to help design new schools as well as repair, renovate, and maintain existing facilities. This website can help school districts and facility planners design schools for improved indoor air quality, however, it is also intended to encourage school districts to embrace the concept of designing high performance schools, an integrated, "whole building" approach to addressing a myriad of important - and sometimes competing - priorities, such as energy efficiency, indoor air quality, day-lighting, materials efficiency, and safety in the context of tight budgets and limited staff. This website also provides easy access to a range of green building resources as well as a detailed list of the recommended actions contained in design tools for schools, at http://epa.gov/iaq/schooldesign/recommended_actions_checklist.html.

Make a Difference Campaign

http://www.epa.gov/epaoswer/education/mad.htm

EPA's "Make a Difference" campaign encourages young people to reduce waste in their homes, schools, and communities. The resources will help students learn about the environmental impacts of the products they use everyday and will enable them to make informed decisions to help protect the environment.

Backyard Burning – It's a Health Hazard!

http://www.epa.gov/epaoswer/non-hw/muncpl/backyard/index.htm

Backyard burning refers to the burning of household trash by residents on their own property. Trash typically burned can include paper, cardboard, food scraps, plastics, and yard trimmings essentially any materials that would otherwise be recycled or sent to a landfill. Most people who burn their waste do not realize how harmful this practice is to their health and to the environment. It can increase the risk of heart disease, aggravate respiratory ailments such as asthma and emphysema, and cause rashes, nausea, or headaches. This website provides the basic information on backyard burning, human health and environmental effects, and what you can do. There are also links to other backyard burning related websites.

Healthy School Environments

http://www.epa.gov/schools/

The Healthy School Environments website is a one-stop location for information and links to school environmental health issues. The website is intended to serve as a gateway to online resources to help facility managers, school administrators, architects, design engineers, school nurses, parents, teachers and staff address environmental health issues in schools.

Radon Publications

http://www.epa.gov/radon/pubs/index.html

The radon publications website contains EPA publications including A Citizen's Guide to Radon, Home Buyer's and Seller's Guide to Radon, A Radon Guide for Tenants, and Radon in Schools. These publications can help educate community members about how to test for and reduce radon, which is a known human lung carcinogen and the second leading cause of lung cancer in the United States.

Indoor Air Quality Building and Education Assessment Model (I-BEAM))

http://www.epa.gov/iaq/largebldgs/i-beam_html/ibeami.htm

I-BEAM is an interactive software program that provides comprehensive guidance modules for managing and assessing indoor air quality, energy efficiency, and buildings economics in offices and other commercial buildings. I-BEAM creates a way for you to learn how to manage for indoor air quality as an integral part of your daily building management activities, with I-BEAM you will be able to: improve indoor air quality (IAQ) in your building– within budget; refine your maintenance program for IAQ; better manage housekeeping services for IAQ; conduct an indoor air quality building audit; train management and staff in indoor air quality; provide documentation that the building is following IAQ building practices; reduce liability exposure to

indoor air quality complaints; and improve the marketability of the building and rental space.

Greenbuilding
http://www.epa.gov/greenbuilding/
Information and links addressing health and environmental concerns arising from buildings.

Green Homes and Schools
http://www.epa.gov/greenbuilding/homes.htm
The website provides information and links for addressing health and environmental concerns arising in and from homes and schools.

Lab Waste at Educational Institutions
http://www.epa.gov/epaoswer/osw/specials/labwaste/index.html
EPA is engaged in several efforts to facilitate improved reuse and recycling of chemicals in educational institutions and better waste management overall.

3.3)   Reducing risks from surface water

Watershed Academy Web-Based Training – Distance Learning Modules: Management Practices Modules
www.epa.gov/watertrain/
Watershed Academy web modules offer basic instruction on the many disciplines that make up watershed management. Modules run ½ to 2 hours each. These modules focused on "Management Practices," show how watershed management challenges such as urban runoff, cropland management, forestry and other issues are addressed by techniques that reduce environmental impacts.

Watershed Approach Framework
http://www.epa.gov/owow/watershed/framework/
This publication explains EPA's vision for watershed approaches; its guiding principles; how to implement the approaches; and the benefits. It also links to some watershed projects and funding.

3.4)   Reducing risks by drinking water

EPA's Annotated Bibliography of Source Water Materials
http://www.epa.gov/safewater/protect/swpbibliography/funding.html
EPA has developed a bibliography of materials on Source Water Protection (SWP). This extensive list of available materials covers a variety of topics of interest to SWP planners, including source water assessment and protection, Best Management Practices, wellhead

protection, Underground Injection Control, CWA/SDWA integration, security, and funding.

Consider The Source: A Pocket Guide to Protecting Your Drinking Water: Drinking Water Pocket Guide #3

http://www.epa.gov/safewater/protect/pdfs/swppocket.pdf

The Guide is a pocket-sized outreach and assistance publications designed to heighten public awareness of the importance of protecting source waters used for drinking water.   It includes a discussion of CWA- and SDWA-based regulatory and voluntary resources, tools, and management measures available to States and local governments and consumers, as well as accessible financing sources for enhancing existing protection programs and future plans. The Guide also includes discussions of integrating UIC program efforts with the Source Water Assessment and Protection Programs, milestones for completion of source water assessments and transitioning to protection, and available Best Management Practices for source water protection areas.

Source Water Stewardship: A Guide to Protecting and Restoring Your Drinking Water

www.protectsourcewater.org/guide.html

The Clean Water Fund, Clean Water Network, and the Campaign for Safe and Affordable Drinking Water have partnered and are working with EPA to promote drinking water source protection. This handbook walks through a process for understanding recently completed assessments that provide information about the source of drinking water in your community, and includes a Quick Start Action List that will help you get involved with protecting and restoring your community's source of drinking water using the assessment.

Source Water Protection Practices Bulletins

http://www.epa.gov/safewater/protect/swpbull.html

EPA has published a series of fact sheets on best management practices (BMP) for activities that are likely to impact the sources of water used as drinking water. Each bulletin discusses how particular activities can be managed in such a way as to prevent contamination of drinking water. Fact sheets cover the following topics: highway deicing, storm water runoff, septic systems, vehicle washing, pet and wildlife waste, applications of fertilizers and pesticides, and many more.

Source Water Protection Local Government Resources

http://www.epa.gov/safewater/protect/localgov.html

This EPA web site connects you to information on source water protection that is available from a number of local government organizations. Although the information was developed to help local government officials much of it can be useful to the general public.

3.5)   Reducing risks from polluted land and solid waste

Resource Conservation Challenge (RCC)
http://www.epa.gov/rcc
The RCC is an innovative national effort, comprised of voluntary partnerships, to find flexible, yet protective, ways to conserve our national resources.

WasteWise
http://www.epa.gov/wastewise
This website provides information on EPA's voluntary Voluntary partnership program that seeks to reduce municipal solid waste through innovative waste prevention and recycling techniques.

Brownfields Cleanup and Redevelopment
http://www.epa.gov/swerosps/bf/index.html
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. This site provides information related to the Brownsfields program including grants, successful redevelopment efforts, legislation, and state and tribal programs.

National Partnership for Environmental Priorities
http://www.epa.gov/minimize/partnership.htm
Voluntary partnership program that encourages companies to make innovative changes in their manufacturing and production processes to reduce the use of priority chemicals.

Municipal Solid Waste (MSW)
http://www.epa.gov/epaoswer/non-hw/muncpl/index.htm -
Across the country, many communities, businesses, and individuals have found creative ways to reduce and better manage MSW through a coordinated mix of practices that includes source reduction, recycling (including composting), and disposal. The most environmentally sound management of MSW is achieved when these approaches are implemented according to EPA's preferred order: source reduction first, recycling and composting second, and disposal in landfills or waste combustors last. This website contains a wealth of information on MSW, including some basic facts about MSW, source reducing, recycling, composting, landfills, combustion, types of programs, etc.

Radioactive Wastes
http://www.epa.gov/ebtpages/wastradioactivewaste.html
This site contains information related to radioactive wastes and how to managing them.

Plug-In To eCycling
http://www.epa.gov/rcc/plugin/

Plug-In To eCycling is a voluntary partnership program that aims to increase the safe recycling of old consumer electronics by providing incentives to manufacturers and retailers to provide more support for eCycling.

GreenScapes Alliance
http://www.epa.gov/greenscapes/
This partnership program provides cost-efficient and environmentally friendly solutions for large-scale landscaping.

Jobs-Through-Recycling
http://www.epa.gov/epaoswer/non-hw/recycle/jtr/index.htm
This website provides recycling market development information for state and local officials, sources of technical and financial assistance for recycling businesses, and general information for visitors interested in learning more about JTR. The site includes specific information on commodities such as batteries, carpet, coal fly ash, construction materials, electronics, glass, industrial by-products—foundry sand, metals, organics, oil, packaging, paper, plastic, rubber/tires, textiles, vehicles, and wood.

EPA's Guide for Industrial Waste Management
http://www.epa.gov/epaoswer/non-hw/industd/guide.htm .
This Guide provides facility managers, state and tribal regulators, and the interested public with recommendations and tools to better address the management of land-disposed, nonhazardous industrial wastes.

Sites for Our Solid Waste: A Guidebook for Effective Public Involvement
http://www.epa.gov/epaoswer/non-hw/muncpl/sites/toc.pdf
This book provides information for the public, public officials, and industry professionals on finding waste sites that are both technically sound and socially acceptable. It encourages public involvement.

Pay-as-You-Throw (PAYT)
http://www.epa.gov/epaoswer/non-hw/payt/index.htm
This website provides links to information on the Pay-as-You Throw Program. Communities with [recycling] programs in place have reported significant increases in recycling and reductions in waste, due primarily to the waste reduction incentive created by PAYT. Less waste and more recycling mean that fewer natural resources need to be extracted. In addition, greenhouse gas emissions associated with the manufacture, distribution, use, and subsequent disposal of products are reduced as a result of the increased recycling and waste reduction PAYT encourages. In this way, PAYT helps slow the buildup of greenhouse gases in the Earth's atmosphere which leads to global climate change.

Underground Storage Tanks

http://www.epa.gov/swerust1/

This website is all about Underground Storage Tanks. In 1983, the CBS program 60 Minutes aired a story called "Check the Water", which brought national attention to families suffering from the effects of gasoline leaking from underground storage tanks at gas stations and other places. Less than a year later, on November 8, 1984, President Reagan signed into law legislation designed to protect the public from these petroleum releases. This website contains information on regulations, guidance, and program activities; links to "where you live"; policy guidance, compliance assistance, etc.

Managing Hazardous Waste in Your Community

http://www.epa.gov/epaoswer/general/manag-hw/manag-hw.htm

Managing Hazardous Waste in Your Community - This publication provides education and outreach about EPA's hazardous waste management program under the Resource Conservation and Recovery Act (RCRA). These fact sheets provide a basic overview of EPA's hazardous waste regulations and include state hazardous waste contacts.

Mercury Wastes

http://www.epa.gov/epaoswer/hazwaste/mercury/index.htm

This website provides a gateway to information about the treatment, disposal, and management of mercury and mercury wastes.

Household Hazardous Wastes

http://www.epa.gov/epaoswer/non-hw/househld/hhw.htm

This website contains information on how to safely handle products around the home that may contain hazardous components. Such products may include certain paints, cleaners, stains and varnishes, car batteries, motor oil, and pesticides. The used of leftover contents of such consumer products are known as "household hazardous waste."

Management of Scrap Tires

http://www.epa.gov/epaoswer/non-hw/muncpl/tires/index.htm -
 This site identified scrap tire concerns (e.g. mosquito breeding, fires) and provides information on the management of scrap tires, including secondary markets.

Medical Wastes

http://www.epa.gov/epaoswer/other/medical/

This site provides information on the management and hazards of the medical wastes. The disease-causing potential of medical waste is greatest at the point of generation and naturally tapers off after that point, thus presenting more of an occupational concern rather than a generalized environmental concern. Risk to the general public of disease caused by exposure to medical waste is likely to be much lower than risk for the occupationally exposed individual.

Used Oil Management Program

http://www.epa.gov/epaoswer/hazwaste/usedoil/index.htm -
This site provides information for both businesses and do-it-yourselfers. It also includes the "You Dump It, You Drink It" campaign, aimed at the Hispanic automotive repair and service industry and consumers, and the brochure Collecting Used Oil for Recycling and Reuse: Tips for Consumers Who Change their Own Motor Oil and Oil Filters (http://www.epa.gov/epaoswer/non-hw/recycle/recy-oil.pdf)

The Coal Combustion Products Partnership (C^2P^2) Program
http://www.epa.gov/epaoswer/osw/conserve/c2p2/index.htm
This program is a cooperative effort between EPA, the coal combustion products (CCP) industry, and partners to help promote the beneficial use of CCPs and the associated environmental, economic, and performance benefits.

Product Stewardship Partnerships
http://www.epa.gov/epr
The voluntary product stewardship partnerships are designed to work with manufacturers, retailers, other governments and non-government organizations to reduce the life-cycle impacts of products.

E-cycling
http://www.epa.gov/epaoswer/osw/conserve/plugin/index.htm
Electronics can present an environmental hazard if they are disposed of improperly. With an average of four pounds of lead in many older TV picture tubes or computer monitors, along with other potentially hazardous materials, electronics call for special handling at the end of their lives.

Office of Solid Waste's What Can You Do ...Around Your Home and Around Your Community
http://www.epa.gov/epaoswer/osw/citizens.htm
This website provides information for consumers on how to reduce, reuse, and recycle materials to decrease the amount and toxicity of the waste produced in and around the home and about waste management programs and opportunities to help consumers get involved and make a difference in the community. Also includes consumer tips in both English <http://www.epa.gov/epaoswer/osw/specials/funfacts/index.htm> and Spanish <http://www.epa.gov/epaoswer/osw/specials/funfacts/indexsp.htm>.

You Dump It, You Drink It Campaign
http://www.epa.gov/epaoswer/hazwaste/usedoil/index.htm#ydiydi
This website highlights the "You Dump It, You Drink It" campaign materials that are aimed at the automotive repair and service industry and consumers. The campaign focuses on the proper management of used motor oil. It provides a variety of free, printed information materials that are available in both Spanish and English.

RCRA in Focus Series (RIF)

http://www.epa.gov/epaoswer/hazwaste/id/infocus/index.htm

RCRA in Focus is a series of publications providing an overview of the EPA's Resource Conservation and Recovery Act (RCRA) regulations affecting specific industry sectors. Intended as a guide for small businesses, RIF presents the lifecycle of a typical waste for each industry and focuses on recycling and pollution prevention options. Several issues are available in Spanish, and the Drycleaning issue is also available in Korean.

Full Cost Accounting for Municipal Wastes

http://www.epa.gov/epaoswer/non-hw/muncpl/fullcost/index.htm

Making cost-effective and informed decisions about municipal solid waste (MSW) programs requires access to a broad spectrum of information. Local government officials need to know what solid waste management really costs. Full cost accounting (FCA) provides a common-sense approach to identifying and assessing the cost of managing solid waste operations. It offers a framework to aid decision-makers with short and long-term program planning and it can help identify measures for streamlining and improving operations.

Materials and Waste Exchanges

http://www.epa.gov/jtr/comm/exchange.htm

This site provides links to various exchange sites. Materials and waste exchanges are markets for buying and selling reusable and recyclable commodities. Some are physical warehouses that advertise available commodities through printed catalogs, while others are simply websites that connect buyers and sellers. Some are coordinated by state and local governments. Others are wholly private, for-profit businesses. The exchanges also vary in terms of area of service and the types of commodities exchanged. In general, waste exchanges tend to handle hazardous materials and industrial process waste while materials exchanges handle nonhazardous items.

Bioreactor Landfills

http://www.epa.gov/epaoswer/non-hw/muncpl/landfill/bioreactors.htm

This website provides information on bioreactor landfills. A bioreactor landfill operates to rapidly transform and degrade organic waste. The EPA is currently collecting information on the advantages and disadvantages of bioreactor landfills through case studies of existing landfills and additional data so that EPA can identify specific bioreactor standards or recommend operating parameters.

> *For technical audiences:*

Decisonmakers Guide to Solid Waste Management

http://www.epa.gov/epaoswer/non-hw/muncpl/dmg2.htm

This Guide was developed particularly for solid waste management practitioners, such as local government officials, facility owners and operators, consultants, and regulatory agency specialists. The Guide contains technical and economic information to help these practitioners meet the daily challenges of planning, managing, and operating municipal solid waste (MSW)

programs and facilities.

3.6) Reducing risks from pesticides

Integrated Pest Management (IPM) Website
http://www.epa.gov/pesticides/factsheets/ipm.htm.
Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

- EPA is encouraging school officials to adopt Integrated Pest Management (IPM) practices to reduce children's exposure to pesticides. EPA has published a brochure titled "Protecting Children in Schools from Pests and Pesticides." The brochure provides resources, success stories and examples of IPM practices for safer pest management within schools. Call 1-800-490-9198 for a copy. The EPA publication number is EPA-735-F-02-014.
- If your school is interested in getting an IPM Program started, visit the EPA supported University of FL website at: http://schoolipm.ifas.ufl.edu/ The website provides a wealth of valuable, free, useful information for school administrators, staff members, pest managers, and parents to start an IPM program.

Reducing Pesticide Risks
http://www.epa.gov/pesticides/health/reducing.htm.
EPA gives priority in its registration program for conventional chemical pesticides to pesticides that meet reduced risk criteria: low-impact on human health, low toxicity to non-target organisms (birds, fish, and plants), low potential for groundwater contamination, lower use rates, low pest resistance potential, and compatibility with Integrated Pest Management. This website provides information on health and safety issues pertinent to pesticide application and usage, how to reduce pesticide risk, and how to protect your children.

Read the Label First!
http://www.epa.gov/pesticides/label/
This is one of the EPA's Pesticides - Topical and Chemical Fact sheets. The fact sheet stresses the importance of reading pesticide labels before using pesticides in different scenarios (e.g., around kids, lawns, pets, and household). It also provides a link to EPA's Consumer Labeling Initiative.

Consumer Labeling Initiative (CLI) Website
http://www.epa.gov/opptintr/labeling/index.htm
This website provides information about CLI. CLI is a voluntary, cooperative partnership among

federal, state, and local government agencies, industry, and other interested groups working to improve product labels on indoor insecticides, outdoor pesticides, and household hard surface cleaners. CLI's goals are to foster pollution prevention, empower consumer choice, and improve consume understanding of information on household consumer product labels.

The Pesticide Environmental Stewardship Program (PESP)
 http://www.epa.gov/oppbppd1/PESP/
PESP is a voluntary program that forms partnerships with pesticide users to reduce the health and environmental risks associated with pesticide use. The goal of PESP is to reduce pesticide risk in both agricultural and nonagricultural settings. This website provides links to information on how to join the PESP membership, strategies, grant opportunities, publications and other resources.

The Lawns and the Environment Initiative
http://epa.gov/pesticides/controlling/garden.htm
This initiative encourages environmentally responsible lawn and landscaping practices for creating and maintaining residential landscapes. Responsible lawn and landscaping — the appropriate use of pesticides, fertilizers, water, plant species, and other best management practices — will enhance the value and benefits of residential landscapes to homeowners, wildlife, and the community. This website provides links to your state or county Cooperative Extension Service and information on the Integrated Pest Management. It also provides links to Citizens Guide to Pest Control and Pesticide Safety and other information resources.

10 Tips to Protect Children from Pesticide and Lead Poisonings
http://www.epa.gov/oppfead1/cb/10_tips/index.html.
This publication addresses steps consumers can take to save children from environmental hazards around the home.

Citizens Guide to Pest Control and Pesticide Safety
http://www.epa.gov/oppfead1/Publications/Cit_Guide/citguide.pdf.
This is a publication designed to help consumers understand what steps to take to control pests in and around the home. It also addresses alternatives to chemical pesticides, including pest prevention and non-chemical pest controls. The idea here is that consumers should be able to control pests without risking their family's health or harming the environment.

Help! It's a Roach Website
http://www.epa.gov/pesticides/kids/roaches/english/index.html.
This website is designed to educate children about roach prevention with entertaining activities (such as coloring in a coloring book, playing an online Dot-to-Dot Game, etc.). Children learn a great deal about roaches, their breeding habits, and the environments under which they can thrive.

Pesticides and Child Safety Fact Sheet

http://www.epa.gov/pesticides/factsheets/childsaf.htm.
This fact sheet presents recommendations for preventing accidental pesticide poisonings of
children and offers background information on the use of pesticides.

Pesticide Safety Tips Fact Sheet
http://www.epa.gov/pesticides/factsheets/pest_ti.htm.
This fact sheet provides a comprehensive list of safety tip for the prevention of pesticide
poisonings.

3.7)   Reducing risks through pollution prevention activities

Design For Environment Program
http://www.epa.gov/dfe/
The Design for the Environment (DfE) program is one of EPA's premier partnership programs,
working with individual industry sectors to compare and improve the performance and human
health and environmental risks and costs of existing and alternative products, processes, and
practices. DfE partnership projects promote integrating cleaner, cheaper, and smarter solutions
into everyday business practices.

Pollution Prevention Resources
http://www.epa.gov/p2/
This website provides general information about pollution prevention (P2) practices, describes
the array of P2 programs and initiatives administered by EPA and other organizations, and
provides contacts for further information.

Pollution Prevention Tips for You
http://www.epa.gov/opptintr/p2home/aboutp2/tips.htm
This website describes some quick actions everyone can do to reduce their environmental
footprint in a range of environmental media.

3.8)   Reducing noise pollution and odors

The Centers for Disease Control's Noise Website
http://www.cdc.gov/nceh/hsb/noise/
This website provides links to Federal and other websites related to noise pollution and hearing
loss.

Concentrated Animal Feeding Operations (CAFOs)
http://www.epa.gov/agriculture/anafobmp.html#Odors
This website provides valuable information on the sources and management of odors from
raising large scale livestock production, such as hog, cattle, dairy, sheep, and poultry farms, that

congregate animals, feed, waste, and production operations on a small land area.

Biosolids and Residuals Management Fact Sheet: Odor Control in Biosolids Management

http://www.epa.gov/owmitnet/mtb/odor_control-biosolids.pdf

This factsheet provides information on the control of odors from biosolids production facilities, and the prevention of odors from the storage, distribution, and application of the biosolids product.

3.9) **Conserving energy**

ENERGY STAR

http://www.energystar.gov/

ENERGY STAR is a government-backed program helping businesses and individuals protect the environment through superior energy efficiency. The ENERGY STAR website provides information directly to interested consumers about the products that qualify for the ENERGY STAR. This information encompasses more than 18,000 individual product models across more than 1,250 manufacturers. It includes savings that can be expected, stores that carry the products, and environmental benefits that will result from using the products.

Global Warming Visitor Center for Concerned Citizens

http://yosemite.epa.gov/oar/globalwarming.nsf/content/VisitorCenterConcernedCitizens.html

This website contains information and links to allow people to better understand how their communities can educe emissions of greenhouse gases. There is also a Kid's Page.

Climate Change and Waste

http://yosemite.epa.gov/oar/globalwarming.nsf/content/ActionsWaste.html

The manufacture, distribution, and use of products – as well as management of the resulting waste – all result in greenhouse gas emissions. Waste prevention and recycling reduce greenhouse gases associated with these activities by reducing methane emissions, saving energy, and increasing forest carbon sequestration. This website provides information on actions that can be taken at every level to reduce, to avoid, and to better understand the risks associated with climate change.

- http://yosemite.epa.gov/oar/globalwarming.nsf/content/Actions.html.provides links to actions and case studies.

3.10) **Improved land use planning**

Getting to Smart Growth: 100 Policies for Implementation
http://www.smartgrowth.org/pdf/gettosg.pdf

This publication serves as a road map for states and communities that have recognized the need for smart growth, but are unclear on how to achieve it. EPA joined with several non-profit and

government organizations to form the Smart Growth Network (SGN) which produced the material.

Getting to Smart Growth II: 100 More Policies for Implementation
http://www.epa.gov/smartgrowth/getting_to_sg2.htm
EPA recently supported the International City/County Management Association (ICMA) and the Smart Growth Network to produce Getting to Smart Growth II: 100 More Policies for Implementation. This primer provides states and communities with policy options that can be mixed and matched to fit local circumstances, visions, and values, and highlights steps that the private sector can take to encourage more livable communities.

Transportation and Air Quality Planning - Linking Land, Air, and Transportation
http://www.epa.gov/otaq/transp/traqsusd.htm
This website provides information and links to additional information on how the physical characteristics and patterns of land development in a region can affect air quality by influencing the travel mode choices available to citizens. Certain types of development patterns necessitate the use of personal cars and trucks for travel. This site contains various information linking the three factors.

Selecting and Implementing Specific Risk Reduction Projects

Green Communities: How Do We Get There?
http://epa.gov/greenkit/4intro.htm
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of what they want to be, developing a plan of action to get them there, and implementing that plan. This chapter provides a framework for action planning, and suggests tools and resources to help develop plans.

Green Communities: Let's Go!
http://epa.gov/greenkit/5intro.htm
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of what they want to be, developing a plan of action to get them there, and implementing that plan. This chapter provides a variety of tools that can help implement action plans. Some tools require a high level of technical expertise, others can be implemented by high school students and interested volunteers.

Community-Based Environmental Protection: A Resource Book for Protecting Ecosystems and Communities – Chapter 4: Strategies to Consider for Ecosystem Protection

http://epa.gov/ecocommunity/pdf/fnlchap4.pdf
This document identifies practical approaches and tools to help communities carry out their own ecosystem protection efforts. Chapter Four addresses how different strategies for protecting the ecosystem that will affect all other segments of the community — businesses, residents, tourists, and others. As a result, the strategies produce positive results not only for the ecosystem, but also for the local economy and the community's quality of life.

Community-Based Environmental Protection: A Resource Book for Protecting Ecosystems and Communities – Chapter 5: Evaluating and Choosing Strategies for Ecosystem Protection Efforts

http://epa.gov/ecocommunity/pdf/fnlchap5.pdf
This document identifies practical approaches and tools to help communities carry out their own ecosystem protection efforts. Chapter Five discusses the process for selecting among risk reduction strategies, recognizing the interaction between community life and ecosystems.

PART IV – Tracking Progress and Moving Forward

Once a community has started to implement projects there is still more that needs to happen. This part provides information on measuring the results of your actions, evaluating projects and communicating results. It also includes information on how to make a stakeholder group self-sustaining including where to get money for additional work.

4.1)   Measuring Results

Environmental Indicators Initiatives
http://www.epa.gov/indicators/
This website provides two documents from EPA's Environmental Indicators Initiatives: Draft Report on the Environment and Draft Technical Document. The Draft Report on the Environment describes the measures/indicators that can be used to track the status of the environment and human health. The Draft Technical Document discusses in detail the indicators and data that are currently available, as well as their limitations.

Performance Measurement Improvement
http://www.epa.gov/ocfo/perform/pmi/
This website is a information hub with links to performance measurement resources, as well as training opportunities and contract support available through EPA.

Green Communities: Indicators
http://epa.gov/greenkit/indicator.htm
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of

what they want to be, developing a plan of action to get them there, and implementing that plan. This section provides tools and resources to help communities use indicators to measure progress.

Check Your Success: A Community Guide to Developing Indicators (EPA & Virginia Tech)

http://www.uap.vt.edu/checkyoursuccess/

This manual is designed to be used by organizations and groups of all sizes that are working on environmental protection projects at a community level. It will assist in efforts to improve your community by helping you develop indicators that measure your success and show you how your group can move beyond a narrow focus and start thinking about how your activities can be used to address the connections between the environment, economy and society.

Recycling Measurement

http://www.epa.gov/epaoswer/non-hw/recycle/recmeas/

This website provides information and links to help state and local government officials learn more about the standard methodology for measuring recycling rates

4.2)   Evaluating ongoing projects

EPA's Evaluation Support Division

http://www.epa.gov/evaluate/

This website is designed as a web-based "gateway", linking to environmental program evaluation information within EPA and information resources beyond the Agency. It examines how EPA is using evaluation to reinforce and enhance many of the performance activities required under the Government Performance and Results Act (GPRA). It also begins to define how evaluation helps transform lessons learned from innovation into changes in environmental management.

- Fact Sheets and Tools for Evaluation (EPA)
  http://www.epa.gov/evaluate/tools.htm
  EPA program evaluation fact sheet and tools website includes information to facilitate the evaluation of environmental programs.   The website includes an evaluation worksheet that provides basic guidelines for planning an evaluation and other products to assist any evaluation.

Evaluation of Community-Based Environmental Protection Projects: Accomplishments and Lessons Learned

http://www.epa.gov/ecocommunity/pdf/evaluate.pdf

This report is an evaluation of five community-based projects in which EPA Regions participated, either as project leader or in a supporting role. The objective was to identify advantages and disadvantages of the community-based approach in these projects; to identify benefits that would not have realized under traditional environmental management programs; and

to identify ways EPA can tailor its participation and support of community initiatives to help produce the best results.

4.3) Communicating results

"A Primer on Health Risk Communication Principles and Practices" Agency for Toxic Substances and Disease Registry(ATSDR)
http://www.atsdr.cdc.gov/HEC/primer.html
The purpose of this Primer is to provide a framework of principles and approaches for the communications of health risk information to diverse audiences. It is intended for ATSDR staff and personnel from other government agencies and private organizations who must respond to public concerns about exposure to hazardous substances in the environment. (Environmental professionals)

4.4) Sustaining community interest and involvement

Green Communities: Let's Go! Community Action - Keeping People Involved
http://epa.gov/greenkit/q5_invol.htm
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of what they want to be, developing a plan of action to get them there, and implementing that plan. This section suggests strategies and tools for sustaining community interest.

How to Fund Your Projects

4.5) Grant Opportunities

Grants.gov (federal government)
http://grants.gov
This site allows organizations to electronically find and apply for competitive grant opportunities from all Federal grant funding agencies.

Environmental Justice related grant opportunities
http://www.epa.gov/compliance/environmentaljustice/grants/index.html
The site contains information on the Office of Environmental Justice's Small Grants Program. The program provides financial assistance to eligible community groups working on or planning to carry out projects to address environmental justice issues.

Environmental Justice Collaborative Problem-Solving Grant Program
http://www.epa.gov/compliance/environmentaljustice/grants/index.html .

This site provides a list of grant programs managed out of the Office of Environmental Justice.

Targeted Watershed Grants Program

www.eap.gov/owow/watershed/initiative/

The Targeted Watershed Grants Program was conceived to encourage successful community-based approaches to restore, preserve, and protect the Nation's watersheds. This new competitive grant program is a bold approach to watershed management in that it will provide needed resources to those watershed organizations whose restoration plans are ripe, and who are anxious to achieve quick, yet tangible environmental change.

Catalog of Federal Funding Sources for Watershed Protection

www.epa.gov/watershedfunding

A searchable, interactive Website to support watershed stakeholders' efforts to secure funding to implement watershed protection projects.

Funding for Source Water Protection Activities

http://www.epa.gov/safewater/protect/pdfs/guide_swp_swp_funding_matrix.pdf

This short publication provides a listing of Federal resources that can be used to protect drinking water sources.

Consider The Source: A Pocket Guide to Protecting Your Drinking Water: Drinking Water Pocket Guide #3

http://www.epa.gov/safewater/protect/pdfs/swppocket.pdf

The Guide is a pocket-sized outreach and assistance publications designed to heighten public awareness of the importance of protecting source waters used for drinking water.   It includes accessible financing sources for enhancing existing protection programs and future plans.

EPA's Office of Air and Radiation's (OAR) funding opportunities database

http://www.epa.gov/air/grants_funding.html#oaqps

This sites lists all of OAR's grants, cooperative agreements, and other assistance agreement vehicles that are subject to the Agency's competition policy. OAR grants and other funding opportunities are posted as they become available. The site also contains assistance in the form of an Application Kit which includes application forms and other information and a Grant Writing Tutorial is also available to assist you in applying for these grants. While the site does contain a tutorial it is best suited to someone familiar with federal grants and funding projects.

EPA's Clean School Bus USA

http://www.epa.gov/otaq/schoolbus/funding.htm

This site contains information about EPA's Clean School Bus USA program with a focus on sources of funding. School buses are the safest way for children to get to school. However, pollution from diesel vehicles has health implications for everyone, especially children. Clean School Bus USA is an initiative sponsored by EPA to help communities reduce pollution from

school buses. To date, Congress has provided ten million dollars in grant funding to help communities replace or upgrade their school bus fleets. In addition, some school bus retrofit programs have been funded through state-negotiated settlements in legal actions against companies that violated state environmental laws. Contact your state environmental agency about the possibility of receiving money resulting from an enforcement action.

EPA's Voluntary Diesel Retrofit Program
www.epa.gov/otaq/retrofit/
EPA's Voluntary Diesel Retrofit Program helps to reduce pollution from large diesel vehicles and equipment in use today. This program complements EPA's regulations which will dramatically reduce pollution from new diesel trucks, buses and nonroad equipment. Grant funds are periodically available to assist communities in implementing retrofit and replacements projects, including installation of pollution control hardware and use of cleaner fuels.

Funding Opportunities: A Directory of Energy Efficiency, Renewable Energy and Environmental Protection Assistance Programs
It is not currently posted on line but is available from Steve Dunn at dunn.stevev@epa.gov. or 202-343-9341.
This publication provides information on financial and technical assistance opportunities available from EPA, other federal agencies, state governments and private foundations for programs and projects that reduce energy costs, improve air quality and public health, and enhance economic development opportunities for business and consumers. The guide is updated regularly.

OPPT Community Assistance Program (CAP)
http://epa.gov/oppt/cahp/
This website provides information that may be useful to communities such as: information on chemicals and their effects, tools to help understand and use environmental data, programs and solutions to concerns about chemicals, grants to support community initiatives, forums for Tribes and Environmental Justice communities, and related Programs.

The Strategic Agricultural Initiative (SAI)
http://epa.gov/pesticides/grants/aginitiative.htm
SAI is a regional grants program that assists growers with pest management strategies that identify alternatives to conventional pesticides. Through SAI, EPA is implementing model agricultural partnership projects to demonstrate and facilitate the adoption of pest management practices that provide growers with a reasonable transition away from the highest risk pesticides, as designated by the Food Quality Protection Act of 1996.

Urban Initiative Program
http://epa.gov/pesticides/grants/urbaninitiative.htm
EPA awards grants under the Urban Initiative which grew out of the agricultural pesticide,

methyl parathion, misuse in states like Mississippi and Tennessee. Urban Initiative grant dollars are used on projects that help prevent agricultural pesticide misuse in the urban setting. The grants have also addressed the area of unregistered, illegal pesticides imported into the US for use in homes.

4.6)   Funding through stakeholder partnerships, local resources and other funding mechanisms

EPA's Environmental Finance Program
http://www.epa.gov/efinpage
EPA has developed the Environmental Finance Program to assist communities in their search for creative approaches to funding their environmental projects.
- http://www.epa.gov/efinpage/guidbkpdf.htm - A Guidebook of Financial Tools: Paying for Sustainable Environmental Systems   (April 1999 revision), has been produced by the Environmental Financial Advisory Board and the Environmental Finance Center Network.

(This site is best suited to someone that is familiar with federal grants and funding projects.)

Clean Water State Revolving Fund (CWSRF)
http://www.epa.gov/OW-OWM.html/cwfinance/cwsrf/basics.htm
This site provides information on the CWSRF programs operate much like environmental infrastructure banks that are capitalized with federal and state contributions. CWSRF monies are loaned to communities and loan repayments are recycled back into the program to fund additional water quality protection projects. The revolving nature of these programs provides for an ongoing funding source that will last far into the future. States have the flexibility to target resources to their particular environmental needs, including contaminated runoff from urban and agricultural areas, wetlands restoration, groundwater protection, brownfields remediation, estuary management, and wastewater treatment.

Drinking Water State Revolving Fund
http://www.epa.gov/safewater/dwsrf.html#Facts
This site provides information on the Drinking Water State Revolving Fund. The fund makes money available to drinking water systems to finance infrastructure improvements. The program also emphasizes providing funds to small and disadvantaged communities and to programs that encourage pollution prevention as a tool for ensuring safe drinking water.

4.7)   Supplemental Environmental Projects

Supplemental Environmental Projects
http://www.epa.gov/compliance/civil/programs/seps/index.html
A Supplement Environmental Project (SEP) is part of an enforcement settlement connected with

the violation of an environmental statutory or regulatory requirement. As part of the enforcement settlement, a violator voluntarily agrees to undertake an environmentally beneficial project in exchange for a reduction in the penalty. A SEP furthers EPA's goal of protecting and enhancing the public health and the environment, and does not include the activities a violator must take to comply with the law. This website provides information regarding SEPs, such as characteristics SEPs must have and opportunities for submitting ideas for SEPs.

Part V- Complete Process Resources:
Sites That Have Information on the Whole Process

A few sites look at the whole process of community base projects. This part lists those resources.

Green Communities: Five Steps to Community Sustainability
http://www.epa.gov/greenkit/
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of what they want to be, developing a plan of action to get them there, and implementing that plan. Step One - Community Assessment Where Are We Going? Step Two - Trends Analysis Where Do We Want To Be? Step Three - Vision Statement How Do We Get There? Step Four - Sustainable Action Plans Let's Go! Step Five - Implementation

Community-Based Environmental Protection: A Resource Book for Protecting Ecosystems and Communities
http://epa.gov/ecocommunity/tools/resourcebook.htm
This document identifies practical approaches and tools to help communities carry out their own ecosystem protection efforts.

Envirosense - Enviroene
http://es.epa.gov/index.html
This Enviroene, website provides users with pollution prevention/cleaner production solutions, compliance and enforcement assistance information, and innovative technology and policy options. It also provides access to funding, grants, and environmental research publications. It includes a search engine that searches multiple websites (inside and outside the EPA), and offers assistance in preparing a search.

Part VI - Learning from the Experience of Others - Case Studies

There have been a number of community based projects around the country. This part contains reports that will let you learn from their experience.

6.1) Multimedia projects

CBEP Issues and Responses - Case Studies
http://www.epa.gov/ecocommunity/case1/index.htm
This website provides brief examples of community-based approaches to environmental protection. Contains community and ecosystem level case studies and links to guidance documents

Green Communities: Five Steps to Community Sustainability
http://www.epa.gov/greenkit/
The Green Communities is a comprehensive guide and toolkit that walks communities through the process of assessing their environment, identifying environmental trends, creating a vision of what they want to be, developing a plan of action to get them there, and implementing that plan. Each chapter includes an extensive list of case study examples with contact information.

6.2) Waste and brownfields

Cse studies are highlighted on the waste minimization partnerships website <http://www.epa.gov/epaoswer/hazwaste/minimize/casestud.htm>, GreenScapes website <http://www.epa.gov/epaoswer/non-hw/green/success.htm>, and in issues of WasteWise Update <http://www.epa.gov/epaoswer/non-hw/reduce/wstewise/wrr/updates.htm>

6.3) Air projects

EPA's Air Toxics Community Assessment and Risk Reduction Projects Database
http://yosemite.epa.gov/oar/CommunityAssessment.nsf/Welcome?OpenForm
This database has been compiled to provide a resource of planned, completed, and ongoing community level air toxics assessments across the country. By sharing information about efforts at the local level to measure, understand, and address air toxics emissions, this database will help ensure that communities designing and implementing their own assessments will be able to build upon past efforts and lessons learned.

Cleveland Clean Air Century Campaign (formerly Cleveland Air Toxics Project) (American Lung Association of Ohio)
http://www.ohiolung.org/ccacc.htm
The Cleveland Clean Air Century Campaign is a community-based project with the goals to (1) reduce air toxics in Cleveland within a year; (2) ensure the project is sustainable over time within the community; and, (3) ensure the approach can be replicated in other counties across the United States. The project developed from an EPA community based project in Cleveland. The website contains fact sheets and brochures, as well as a list of projects that the community is doing to reduce air toxics, and other information that could be useful to any community trying to reduce

toxics.

Philadelphia Toxic Air Pollutants Risk Reduction Project
http://www.epa.gov/reg3artd/airquality/phila_toxics.htm
EPA and Philadelphia Air Management Services (AMS) are conducting a joint project, called the "Philadelphia Toxic Air Pollutants Risk Reduction Project" to help reduce the threat to their health which Philadelphia's residents face from exposure to air toxics. This website provides a link to a brochure which discusses the project and a contact for further information.

**6.4)	Water projects**

Case Studies of Local Source Water Protection Programs
http://www.epa.gov/safewater/protect/casesty/casestudy.html
EPA's Office of Ground Water and Drinking Water has compiled examples of good local source water protection programs. These case studies represent a variety of approaches to protecting sources of drinking water supplies for a diverse group of communities that differ in size, geography, economic and social characteristics, and type of source water used (surface water, ground water, or both). What they have in common is a fairly comprehensive approach to source water protection that reflects a strong commitment to safeguarding the public's health. Communities interested in moving to source water protection can use them as references in designing their own programs.

GLOSSARY

Go to EPA's Terms of the Environment
http://www.epa.gov/OCEPAterms/