

Sustainable Futures / P2 Framework Manual 2012 EPA-748-B12-001
Appendix C. Data Sources

Appendix C. Sources of Measured Data.....	C-1
Physical / Chemical Property and Environmental Fate Data Sources	C-1
Human Health and Environmental Hazard/Toxicity Data.....	C-3
Environmental Release Data.....	C-4
Exposure Parameters Data	C-5
Population Data	C-6

Appendix C. Sources of Measured Data

The data sources included here are not intended to represent the only or best sources of data available. Site visitors are strongly encouraged to conduct their own searches for data. The types of data found in these sources included here are:

- Physical / Chemical Property and Environmental Fate
- Human Health Hazard
- Environmental Hazard
- Environmental Release
- Exposure Parameter and Population

Alphabetical List of EPA Databases and Software at has an Alphabetical List of EPA Databases and Software and is useful identifying potential sources of data on a wide range of topics. The companion Databases and Software <http://www.epa.gov/epahome/data.html> page lists these same sources by topic. EPA, Office of Environmental Information (OEI) <http://www.epa.gov/epahome/abcdata.htm>

The URLs of certain Internet sites are listed here to provide information to users of the manual. Users should be aware that due to the dynamic nature of the Internet, these URLs may have been changed from the time of the writing of this document. In case a URL is no longer correct, the site visitor is advised to use any of the publicly available Internet search engines to locate the correct URL.

Physical / Chemical Property and Environmental Fate Data Sources

Chemical Data Access Tool (CDAT) searches health and safety information submitted to EPA under the Toxic Substances Control Act (TSCA). CDAT allows users to find health and safety information submitted to EPA under TSCA Sections 4, 5, 8(d), and 8(e). Searchable databases include eDOC, TSCATS, HPVIS, Declass, and 8e VDCP. EPA OCSPP http://java.epa.gov/oppt_chemical_search/

Chemical Testing and Data Collection web site provides access to information on Chemical Testing and non-confidential summaries of data collected under the Sections of Toxic Substances Control Act (TSCA) EPA OCSPP <http://www.epa.gov/oppt/chemtest/index.html>

ChemIDplus and **ChemIDplus Lite** contain numerous chemical synonyms, structures, regulatory list information, links to other databases containing chemical information, and allows substructure searching. NIH <http://chem.sis.nlm.nih.gov/chemidplus/>

CompTox (Computational Toxicology Research) evaluates methods for managing the safety of chemicals, particularly in assessing chemicals for potential risk to human health and the environment. Their web site allows searching of ACToR, DSSTox, ExpoCastDB (Exposure-Based Chemical Prioritization Database), ToxCastDB (Toxicity Forecaster Database), ToxRefDB (Toxicity Reference Database), and ToxPi (Toxicological Priority Index). EPA ORD <http://www.epa.gov/comptox/#>

Data Finder provides a single point of access to a large selection of EPA data sources, organized into topics such as air and water that are in easily downloadable formats. For each data source, you can see a basic overview, including the geographic scale and other contextual information, then access the data source itself. EPA OEI <http://www.epa.gov/datafinder/>

Sustainable Futures / P2 Framework Manual 2012 EPA-748-B12-001
Appendix C. Data Sources

eChemPortal is OECD Global Portal to Information on Chemical Substances and provides free public access to information on properties of chemicals, including: physical chemical properties, ecotoxicity, toxicity, and environmental fate and behavior.

http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

Environmental Sciences Program conducts research and development, and technology transfer of programs relating to environmental exposures of ecological and human receptors. Their Databases and Software page lists numerous modeling and data management tools. EPA ORD

<http://www.epa.gov/nerlesd1/>

Health Effects Notebook for Hazardous Air Pollutants provides this page of fact sheets on hazardous air pollutants as defined as hazardous by the 1990 amendments of the Clean Air Act. The fact sheets have physical/chemical, toxicity, exposure and use information on certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present tangible hazard, based on scientific studies of exposure to humans and other mammals. EPA OAR <http://www.epa.gov/ttnatw01/hlthef/hapindex.html>

HPVIS (High Production Volume Information System) provides access to health and environmental effects information obtained through the High Production Volume (HPV) Challenge which challenged companies to make data publicly available on chemicals produced or imported into the U.S. in quantities of 1 million pounds or more per year. The web site enables users to search for summary information, test plans, and new data on HPV chemicals as they are received. EPA OCSP <http://www.epa.gov/hpvis/>

International Uniform Chemical Information Database (IUCLID) is a data submission tool developed to support the European REACH Regulation as well as other Chemical Evaluation Programs, such as the OECD HPVC Program. Industry stakeholders, IUCLID contains CAS RN, physical/chemical data, toxicology, environmental toxicity and fate information on HPV Chemicals. <http://iuclid.eu/>

KEMI (the Swedish Chemicals Agency) operates this web site which provides links to many other web sites which contain chemical data. <http://www.kemi.se/en/Content/Links/Finding-information-on-other-websites/>

Merck Index online offers free access to this encyclopedia of chemicals, drugs, and biological agents that contains more than 10,000 monographs. Each monograph in this authoritative reference source is a concise description of a single substance or a small group of closely related compounds.

<http://themerckindex.chemfinder.com/TheMerckIndex/Forms/Home/ContentArea/Home.aspx>

National Service Center for Environmental Publications (NSCEP) allows users to search for chemical names and properties in EPA publications. For example a word search for "dioxin" gives more than 5000 publications, and "dioxin health effects" gives 11 publications. EPA OEI

<http://www.epa.gov/nscep/index.html>

ToxFAQs™ is ATSDR's series of summaries about hazardous substances developed by the ATSDR Division of Toxicology. Information for this series is excerpted from the ATSDR Toxicological Profiles and Public Health Statements. Each fact sheet serves as a quick and easy to understand guide. Answers are provided to the most frequently asked questions (FAQs) about exposure to hazardous substances found around hazardous waste sites and the effects of exposure on human health. CDC

<http://www.atsdr.cdc.gov/toxfaqs/index.asp>

TOXNET is an integrated database system of hazardous chemicals, toxic releases and environmental health. Databases accessed include HSDB, IRIS, TRI, TOXMAP, and others. NIH

<http://toxnet.nlm.nih.gov/>

TSCATS (Toxic Substance Control Act Test Submission Database) contains unpublished technical reports submitted by industry to EPA under TSCA on over 8,000 chemicals that are categorized into three broad subject areas (health effects, environmental effects, and environmental fate). Searches can be

Sustainable Futures / P2 Framework Manual 2012 EPA-748-B12-001
Appendix C. Data Sources

conducted using these subject areas plus additional indexing terms from the controlled vocabulary of testing protocol describing observations (i.e., species, duration of study, etc.). EPA OCSPF
<http://yosemite.epa.gov/oppts/epatscat8.nsf/ReportSearch?OpenForm>

Human Health and Environmental Hazard/Toxicity Data

Chemical Data Access Tool (CDAT) http://java.epa.gov/oppt_chemical_search/

Chemical Testing and Data Collection <http://www.epa.gov/oppt/chemtest/index.html>

ChemIDplus and ChemIDplus Lite <http://chem.sis.nlm.nih.gov/chemidplus/>

CompTox (Computational Toxicology Research) <http://www.epa.gov/comptox/#>

Data Finder <http://www.epa.gov/datafinder/>

DSSTox (Distributed Structure-Searchable Toxicity) Database Network provides a public forum for publishing downloadable, structure-searchable, standardized chemical structure files associated with chemical inventories or toxicity data sets of environmental relevance. <http://www.epa.gov/ncct/dsstox/>

eChemPortal OECD Global Portal to Information on Chemical Substances
http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

ECOTOX (ECOTOXicology) Database provides single chemical toxicity information for aquatic and terrestrial organisms EPA ORD <http://cfpub.epa.gov/ecotox/>

Environmental Sciences Program <http://www.epa.gov/nerlesd1/>

Health Effects Notebook for Hazardous Air Pollutants
<http://www.epa.gov/ttnatw01/hlthef/hapindex.html>

HPVIS (High Production Volume Information System) <http://www.epa.gov/hpvis/>

International Agency for Research on Cancer (IARC) part of the World Health Organization, the IARC has numerous on-line publications with data on cancer potential of chemicals <http://www.iarc.fr/>

Integrated Risk Information System (IRIS) is a human health assessment program that evaluates information on health effects that may result from exposure to environmental contaminants. Through the IRIS Program, EPA provides the highest quality science-based human health assessments to support the Agency's regulatory activities. The IRIS database is web accessible and contains information on more than 550 chemical substances. EPA ORD <http://www.epa.gov/iris/>

International Uniform Chemical Information Database (IUCLID) <http://iuclid.eu/>

KEMI (the Swedish Chemicals Agency) <http://www.kemi.se/en/Content/Links/Finding-information-on-other-websites/>

Merck Index
<http://themerckindex.chemfinder.com/TheMerckIndex/Forms/Home/ContentArea/Home.aspx>

National Service Center for Environmental Publications (NSCEP)
<http://www.epa.gov/nscep/index.html>

Sustainable Futures / P2 Framework Manual 2012 EPA-748-B12-001

Appendix C. Data Sources

National Toxicology Program (NTP) evaluates toxicity of chemicals determined to be public health concerns. NIH <http://ntp.niehs.nih.gov/>

ToxFAQs™ <http://www.atsdr.cdc.gov/toxfaqs/index.asp>

TOXNET <http://toxnet.nlm.nih.gov/>

TSCATS (Toxic Substance Control Act Test Submission Database)

<http://yosemite.epa.gov/oppts/epatscat8.nsf/ReportSearch?OpenForm>

Experimental Cancer Data can be found in these sources

International Agency for Research on Cancer (IARC) <http://monographs.iarc.fr>

National Toxicology Program (NTP) <http://ntp-server.niehs.nih.gov/>

Environmental Health Criteria (EHC) <http://www.inchem.org/>

Chemical Carcinogenesis Research Information System (CCRIS) searchable through TOXNET <http://toxnet.nlm.nih.gov/>

Gold database <http://potency.berkeley.edu>

ACToR – Aggregated Computational Toxicology Resource (EPA) <http://www.epa.gov/actor/> or <http://www.epa.gov/comptox/#>

Environmental Release Data

AirData provides access to air quality data collected at outdoor monitors across the United States. Data searched included AQI (Air Quality Index) and AQS (Air Quality System) and air monitoring data. EPA, OAR <http://www.epa.gov/airdata/>

Beach Advisory and Closing Online Notification BEach (BEACON) web site allows the general public to search a database of pollution occurrences for coastal recreation waters. The target audience is the general public. EPA, Office of Water <http://watersgeo.epa.gov/beacon2/>

Data Finder <http://www.epa.gov/datafinder/>

Emissions & Generation Resource Integrated Database (eGRID) is a comprehensive source of data on environmental characteristics of almost all electric power generated in the U.S. These environmental characteristics include air emissions for nitrogen oxides, sulfur dioxide, carbon dioxide, methane, and nitrous oxide; emissions rates; net generation; resource mix; and many other attributes. <http://www.epa.gov/cleanenergy/energy-resources/egrid/index.html>

Envirofacts is EPA's Environmental Data Warehouse and web site that provides a single point of access to numerous EPA Environmental databases, including access to information about environmental activities that may affect air, water, and land anywhere in the United States. Target audience is the general public EPA OEI <http://www.epa.gov/enviro/>

Environmental Sciences Program <http://www.epa.gov/nerlesd1/>

Health Effects Notebook for Hazardous Air Pollutants

<http://www.epa.gov/ttnatw01/hlthef/hapindex.html>

Sustainable Futures / P2 Framework Manual 2012 EPA-748-B12-001
Appendix C. Data Sources

Toxic Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment. <http://www.epa.gov/tri/>

Exposure Parameters Data

The Exposure Factors Handbook (October 2011) summarizes the available statistical data on various factors used in assessing human exposure. This Handbook is addressed to exposure assessors inside the Agency as well as outside, who need to obtain data on standard factors to calculate human exposure to environmental agents. These factors include: drinking water consumption, soil ingestion, inhalation rates, dermal factors including skin area and soil adherence factors, consumption of fruits and vegetables, fish, meats, dairy products, homegrown foods, human milk intake, human activity factors, consumer product use, and building characteristics. Recommended values are for the general population and also for various segments of the population who may have characteristics different from the general population. NCEA has strived to include full discussions of the issues that assessors should consider in deciding how to use these data and recommendations. <http://www.epa.gov/ncea/efh/report.html>

Child-Specific Exposure Factors Handbook (2008) provides information on various physiological and behavioral factors commonly used in assessing children's exposure to environmental chemicals. Children have different exposure circumstances than do adults. Understanding these differences is critical for evaluating potential for environmental hazards from pollutants. They consume more of certain foods and water and have higher inhalation rates per unit of body weight than adults. Young children play close to the ground and come into contact with contaminated soil outdoors and with contaminated dust on surfaces and carpets indoors. Ingestion of human milk may be another potential pathway of exposure for infants and young children. <http://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=199243#Download>

Highlights of the Child-Specific Exposure Factors Handbook provides some introductory information about the handbook and presents a summary of the recommendations presented in the Child-Specific Exposure Factors Handbook (CSEFH) <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=200445>

Methods for Assessing Exposure to Chemical Substances. U.S. EPA. 1985. Office of Toxic Substances (now OPPT). Washington DC. These methods described in these volumes were identified by OPPT (was OTS) as having utility in exposure assessments on existing and new chemicals under OPPT programs.

All of these volumes are available at EPA's National Service Center for Environmental Publications (NSCEP) <http://www.epa.gov/nscep/index.html>. On the home page you can search by name for the documents.

The titles and document numbers of the volumes are as follows*:

- Vol. 1. Methods for Assessing Exposure to Chemical Substances. (EPA 560/5-85-001).
- Vol. 2. Methods for Assessing Exposure to Chemical Substances in the Ambient Environment. (EPA 560/5-85-002).
- Vol. 3. Methods for Assessing Exposure from Disposal of Chemical Substances (EPA 560/5-85-003).
- Vol. 4. Methods for Enumerating and Characterizing Populations Exposed to Chemical Substances (EPA 560/5-85-003).
- Vol. 5. Methods for Assessing Exposure to Chemical Substances in Drinking Water (EPA 560/5-85-005).
- Vol. 6. Methods for Assessing Occupational Exposure to Chemical Substances (EPA 560/5-85-006).
- Vol. 7. Methods for Assessing Consumer Exposure to Chemical Substances (EPA 560/5-85-007).
- Vol. 8. Methods for Assessing Environmental Pathways of Food Contamination (EPA 560/5-85-008).
- Vol. 9. Methods for Assessing Exposure to Chemical Substances Resulting from Transportation-Related Spills (EPA 560/5-85-009).

Sustainable Futures / P2 Framework Manual 2012 EPA-748-B12-001
Appendix C. Data Sources

Vol. 11. Methods for Estimating the Migration of Chemical Substances from Solid Matrices (EPA 560/5-85-015).

Vol. 13. Methods for Estimating Retention of Liquids on Hands (EPA 560/55-85-017).

*Volumes 10 and 12 were not issued.

Population Data

Census of Population Reports. U.S. Bureau of the Census. Available from the U.S. Bureau of the Census on the Internet. Printed copies can also be ordered on this site. Populations are characterized geographically by social and economic characteristics, and also by housing characteristics.

<http://www.census.gov/prod/www/abs/popula.html>