Communication Product Standards

STYLEBOOK

EPA

This manual provides standards that are in accordance with the EPA Product Review system, the Government Printing Office and the Joint Committee on Printing. The writing portion of this manual follows the AP (Associated Press) Style Guide. This manual complies with **Section 508 of the Rehabilitation Act** - all media are to be made available in accessible formats for individuals with disabilities at www.epa.gov/productreview.

For more information about this guide and EPA communications please contact the Office of Public Affairs.

Communication Product Standards

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Introduction

This stylebook is intended to help you, U.S. Environmental Protection Agency (EPA) staff, to prepare and review Agency communications. Our main focus is to guide the style, format and presentation of EPA's content and communications.

The EPA Stylebook provides guidance for most media, including print documents, audiovisual, broadcast, presentation and exhibit work. It does not directly address news media, such as news releases. Consult separate guides about correspondence and Web design at http://yosemite.epa.gov/oei/webguide.nsf/standards-guidance.

We also provide several templates and samples, reference documents, copyright requirements and information on training courses, as well as information about publishing software, the general form of a publication, required forms and processes. This stylebook outlines basic standards and some detailed guidance to help you create high-quality communications, notably including standards for the creation and use of logos.

The 2008 edition represents the first major update of EPA style and formatting in many years. This edition is a basic set of standards and guidelines, which periodically will be updated to keep pace with changes in conventions and technology.

Background

In early 2008, EPA's Deputy Administrator directed that an Agency-wide workgroup be formed to: (1) examine Agency procedure and policy to develop a consistent approach to creating and producing communications; (2) determine if the need for EPA to speak with one clear, consistent voice could be enhanced in visual and written public communications across the board and through the diverse range of EPA activities and diverse range of audiences with whom we communicate; and (3) suggest and implement recommendations based upon that examination and determination.

Coordinated by EPA's Office of Public Affairs, the committee included representatives from nearly every major program and region across the Agency. Our recommendations can be summarized as an effort to achieve the three workgroup goals through the creation of this stylebook. This book provides a uniform set of standards, so you do not need to revisit basic considerations with every new project. With basic considerations a given, you can direct your attention to more creative and focused aspects of your work.

We did our best to follow our own rules. This stylebook is written in plain language. Much of the stylebook's contents relate to EPA and Government Printing Office (GPO) policy and must be followed as rules. Other contents of the stylebook are simply suggestions for you, fellow Agency communicators, to follow to create stronger communication materials.

Adhering to this stylebook's criteria for basic design and writing will help you: (1) move more readily to decisions about substantive content, audience and media targeting and effective/creative presentation; (2) reduce the need for more costly outside services by increasing in-house efficiency; (3) standardize formats and sizes of products; (4) economize on graphics and printing costs; and (5) reduce waste and redundancy through common, centralized procedures.

Inclusions and Exceptions

The standards, practices and guidelines in the stylebook **are directly applicable to the design and writing of**:

Audiovisual, video and motion picture presentations
Handbooks and manuals
Brochures, leaflets, pamphlets and posters
Promotional products
Displays and exhibits
Reports (see below for exceptions)
Fact sheets, fliers, handbills and announcements

…and to the design of:

Conference proceedings
Non-English material (see below: Translation Protocol)
Criteria documents
Technical research publications (see exceptions below)
Data-set and fact book publications

These guidelines **do not apply to the design or writing o**f:

Articles for publication in media not controlled by EPA (including, but not limited to):
    bylined or feature articles by EPA employees
    letters to the editor by EPA employees
    peer-reviewed journal articles
Contracts, purchase orders, solicitation of bids
Correspondence (postal and e-mail)
Congressional testimony
EPA Web site (materials created explicitly for the EPA Web site)
Guidance documents (i.e., official guidance for regulatory compliance)
Internal policy statements and directives
Legal and regulatory materials (including, but not limited to):
    Briefs
    Legal opinions
    Notices of rule making
    Federal Register notices
    Notices of public hearings
Regulations
News releases and accompanying materials
Peer-reviewed documents
Reports of the following types:
    Investigatory or Inspector General
    Congressional
    Science Advisory Boards
    Administrative or fiscal reports

Even in the formats noted above as exclusions, writers and designers certainly may use this stylebook as a guide wherever practicable. Although much in the area of EPA news releases and Web materials is directly related to the standards in this stylebook, the quantity and kind of specific exceptions require those formats to practice under a separate set of criteria.

For public information materials that are translated into languages other than English, or that are created, as original, in other than English, you should consult the EPA Translation Protocol.

In designing such materials, the design guidelines of this stylebook generally should be followed, but we all should be aware that cross-cultural communication can sometimes affect the visual treatment of a subject, as well as the written/verbal approach.

As this edition of the Stylebook is being prepared, plans are being made for a future edition that will include design standards for official uniforms and apparel.

Creating Communications in Larger Context

Use this stylebook as an integral part of the **EPA Communications Product Review system**. The Product Review system is the communication management process that requires each program and regional office to ensure Agency communications serve the public interest and the immediate interests of intended audiences, as well as to ensure messages are coordinated fully across the Agency to convey EPA operations and policy with the highest degree of consistency and accuracy. For a full explanation of the Product Review system, see: http://www.epa.gov/productreview/index.html.

The Product Review system helps us remember another important principle that is vital to producing good communications: strategic planning of communications. Because good communication involves strong elements of creativity and art, it is tempting to imagine that products spring forth in moments of creative and artistic inspiration. That's rarely reality. In fact, good communication is usually a product of research, audience targeting, media and format selection appropriate to the audience, careful strategic construct of the key message and the specific formulation of that message through words and graphics.

Each phase of the development process applies to every product. EPA materials should be structured as multi-faceted, integrated campaigns that are constructed from those same elements of research, audience targeting, media and format selection, and message crafting from concept through production. Whether it is a booklet, video, exhibit or other format, the product will reflect the process. The following pages about communicating from concept through production will help you create high-quality, effective products.

Basic Checklist for Product Development

1. Develop Your Concept:

Develop your communications product concept. **Consult with your office's communications staff, your Product Review Officer and OPA.** Early consultation leads to a better product every time.

- Questions to consider: What are you trying to communicate? What are you trying to get your audience to do? Identify your top messages. Through what means will you communicate your message and get people to take action? The Web? A podcast? A brochure? A promotional item?
- Determine if similar EPA products already exist and can simply be improved upon. For example, if your product is intended for teachers or students, check the Environmental Education Resource Center on the EPA Intranet.

For more information on this topic, see page 31

2. Identify Your Audience:

Determine the audience you wish to reach.

- Are you targeting scientists, businesses, mothers, gas station owners or the general public? Your product should suit your target audience.
- How prepared is your audience to use your information? What do they need to learn in order to use the information effectively? What do they already understand?

For more information on this topic, see page 28

3. Develop a Distribution Plan:

Develop a distribution plan that will best get your product to your target audience.
- Distribution can be more complex and expensive than expected depending on the type of product you selected. For example, a multi-page full color brochure mailed to multiple stakeholders will be more costly than a product intended for the Web.

For more information on this topic, see page 68

4. Get a Cost Estimate:

Get approval from your manager and obtain funding for the development of the product, printing or production, and for distribution. Consult with your manager and Contracting Officer/Contracting Officer's Representative if your product needs to be created by a contractor. Develop a cost estimate and get approval from your manager.

5. Concept Product Review:

Continue working with your communications staff and Product Review Officer to enter your concept description into PROTRAC. You must have OPA approval before proceeding further and/or incurring product development costs.

For more information on this topic, see page 9

6. Use the Stylebook:

Design and develop your communications product using the EPA Communications Product Standards Stylebook and related guides.

For more information on this topic, see page 115

7. Obtain a Publication Number:

Contact the National Service Center for Environmental Publications (NSCEP) for a product number to identify the originating office, the type of product, such as fact sheet or booklet, the date of publication and other factors.

For more information on this topic, see page 77

8. Draft Product Review:

Enter your final product into the PROTRAC for feedback. You must obtain OPA approval prior to moving forward on production or publication.

For more information on this topic, see page 9

9. Publish:

This step will vary depending on your communications medium. For a Web product, consult your Web team member and your Product Review Officer. For audiovisual products, you will likely shoot your video or record your audio file at this time.

For print products, complete a printing request on EPA Form 2200-9 (available electronically on Web Forms) Work with the HQ or regional EPA printing offices where you will receive professional assistance to determine the best printing practices and options for your product.

- Tip: If you are planning a direct distribution from the printer to regional offices or other addresses, include a listing of names and complete addresses and the number of copies going to each location.

For more information on this topic, see page 57

Writing Guide

Writing Guide: Table of Contents

This section of the stylebook outlines EPA's writing style. Generally, writing style comprises grammar, punctuation, vocabulary, syntax and usage. Stylebooks can go beyond that, into narrative style, even identifying organizational and human values to be reflected in communication.

In our basic style, EPA employs the significant work that has been done for us and for millions of other readers and writers by the Associated Press (AP), one of the largest communication services in the world. In the great majority of cases regarding grammar and usage, EPA follows the *AP Stylebook*. We have purchased rights to the *AP Stylebook* for employees to access at: http://www.epa.gov/productreview/guide/apstylebook.html.

Our rights agreement with AP strictly prohibits EPA staff from downloading hard copies or individual pages of our on-line *AP Stylebook*. It is a large volume with over 700 pages, and you can purchase hard copies from the AP on-line shop or at a local bookstore. Since it is a relatively low-cost item, the *AP Stylebook* can be obtained through the small purchase authority of most EPA offices. You are of course free to peruse the manual online; you simply cannot download or print the book. We hope that this much shorter and free EPA stylebook can act as a "cheat sheet" for you.

In our academic courses, many of us learned writing styles from such widely used manuals as Strunk and White, Turabian and the Modern Language Association. These are the manuals that taught us the style commonly called standard English.

Others of us were guided in academic and professional careers by respected styles such as those of the American Psychological Association, American Bar Association, American Nurses' Association and a number of others. Those styles convey useful ideas and are employed well beyond the immediate membership of their groups, but are not broadly oriented to the wide variety of public interests and audiences that EPA must reach.

A final point about style in general: It is not a restriction on creativity. The most creative organizations in the world have style manuals. Many of them run hundreds or thousands of pages. The most successful book publishers in New York, animation studios in California, and package designers in Chicago have style manuals. They are designed to help organizations communicate in a clear and consistent way. Staying on the road, after all, does not keep you from arriving at the destination.

What is the EPA Writing Style?

Short answer: Associated Press (AP)
Longer answer: Keep reading
This section of the EPA Stylebook will help you uphold the general and distinctive qualities that define EPA's writing style. At its core, EPA style is simply the *AP Stylebook*.

AP style is what the general public is accustomed to seeing because it is the official stylebook of the newspaper industry. As noted earlier, EPA has an online subscription to the AP book on our Intranet. AP updates its stylebook to accommodate changes in conventions and usage. Along with the *AP Stylebook* itself, at: http://www.epa.gov/productreview/guide/apstylebook.html, a guide to frequently asked questions about AP style can be found at: http://www.apstylebook.com/ask_editor.php.

This section of the EPA stylebook covers basic issues of grammar, punctuation and usage. This is the core of our style and mostly dictates requirements and rules. Think of this section as the bricks and lumber to build your house. This might not be the actual house, but without good materials and the proper structure, your house will fall apart.

Style Notes to Remember
The following are requirements of basic punctuation, grammar and usage of EPA writing which modify, supplement, or in some cases reiterate AP style. They are important points that we want you to remember. These areas include:

- Abbreviations
- Acronyms
- Ampersands
- Bylines/Credits
- Capitalization

- Disclaimers
- Diversity
- Gender Bias
- Numbers
- Plain Language

- Regional Designations
- Spelling – *1 word or 2?*
- Titles
- Writing For Kids
- Words and Structure – *fixing some common mistakes*

Abbreviations
Always spell out "United States" when it appears as a noun. "Southwest" is one word; it is abbreviated "SW" like all other compass points. As an adjective, "U.S." is acceptable. State abbreviations: Abbreviation is only appropriate in long lists, addresses, and when used in conjunction with the name of a city, town, village or military base in that state. Per the *AP Stylebook*, use non-Postal Service abbreviations like "Ala.," "Ariz.," "Ga." and "N.M." in conjunction with the name of a city, town, village or military base. Eight states are not abbreviated in text: Alaska, Hawaii, Idaho, Iowa, Maine, Ohio, Texas and Utah. Use the two-letter Postal Service abbreviations only with full addresses, including the ZIP code.

Acronyms
Acronyms are acceptable as long as they were spelled out the first time they appeared.

In addition, the acronym "EPA" is a proper noun; it should be used by itself without "the" in front. For example, a sentence should begin "EPA will ..." instead of *"The EPA will ..."*

Ampersands (&)
Use ampersands only when they are part of a formal name (e.g., C & O Railroad) or when space is at a premium.

Bylines and Staff Credits (see also later section: *Self-aggrandizement*)
GPO printing and binding regulations state: "The printing of government employee bylines in government publications shall be confined to the authors of articles appearing therein, and to the photographers who have originated the pictures contained therein."

In this connection: a) Byline refers to any name listed for credits as opposed to employee names integral to the text itself. b) Author applies to an individual who has conceived of, created, or is responsible for a text or section thereof. c) Author cannot be extended to cover supervisors, managers, advisors, staff committee or workgroup members and other such contributors, who may, however, be listed under "acknowledgments."

You can acknowledge other non-contractor organizations or individuals representing them, although acknowledging an organization alone typically suffices. Contract numbers can be listed, but not the names of contractor staff members. Using the name of the contractor firm is discouraged and should only be used for a specific reason. EPA is solely and entirely responsible for the work of its contractors. Once published, all contractor work is officially ours.

A page for acknowledgements is permitted; as appropriate encouraged, but only acknowledgements – not thanks, not dedications, gratitude, nor congratulations. The work belongs to EPA and EPA does not use the resources of American taxpayers to publish thanks or congratulations to our employees for doing their work. Acknowledgements can and in some cases should indicate which EPA staff offices or staff members produced the work. Acknowledgements are especially helpful in indicating particular reliability of authors and their credentials and providing resources the audience may contact for supplemental information.

Capitalization

Do not capitalize terms such as waste management, disposal, pollution prevention, non-governmental organization, legislation, project, offices, endnote, and sector, and do not capitalize chemical names like lead, mercury, or dioxins. In titles and lists, capitalize only the first word, proper nouns, and other words that would normally be capitalized. Do not capitalize the first letter of each word or all letters.

Agency/agency   capitalized when the *Agency* refers specifically to EPA, as opposed to a generic organization.

Federal, local, native, natives, state, states, tribal, tribes - lowercase unless they begin a sentence or form part of an official title: Cherokee Indian Tribe. Lowercase when used alone and in plural form: U.S. states, the Sioux and Navajo tribes. Lowercase the adjectives tribal and native unless they are parts of a proper name: tribal art, Hopi tribal leaders, Ojibway Tribal Council, Virginia native. Note that Native Americans, American Indians, Indian Country and Alaskan Native Villages should be capitalized.

Internet   a proper noun; capitalize it.

Region, regional capitalize it when referring to a specific EPA regional office: "EPA Region 10 is responsible for..." or "EPA regions are responsible for...". Do not capitalize it if you are referring to a geographic region: "The New England region was hit with heavy snow..."

Section, article not capitalized, even when referring to one part of a law or regulation: "OGC interprets section 1502(b) to mean..."

Title   capitalized when referring to a part of a law or regulation; not capitalized otherwise: "OGC interprets Title 41 to include..." but "The brochure's title should be revised."

Web   according to the *AP Stylebook*, capitalize web when it refers to the World Wide Web, as in "Web site" and "Web page." Note, however, that per the *AP Stylebook*, webcam, webcast, and webmaster are single, lowercase words.

Disclaimers

Documents that include articles by non-EPA employees expressing their own opinions require the following disclaimer: The material in this document has been subject to Agency technical and policy review, and approved for publication as an EPA report. *The views expressed by individual authors, however, are their own, and do not necessarily reflect those of the U.S. Environmental Protection Agency.*

Draft documents require the following disclaimer: *This text is a draft that has not been reviewed for technical accuracy or adherence to EPA policy; do not quote or cite*

Documents that refer to particular companies, trade or service names, product names, or other commercial references require the following disclaimer: *Mention of trade names, products, or services does not convey official EPA approval, endorsement, or recommendation.*

Diversity
Diversity is an important issue that should be considered in the development of every communication.

Gender Bias
Use gender-neutral words. Consult sources like the U.S. Department of Labor's Dictionary of Occupational Titles or Rosalie Maggio's book The Nonsexist Word Finder. Web-based guidance on plain language writing is available at: http://www.plainlanguage.gov.

Numbers
Per the *AP Stylebook*, spell whole numbers below the number 10, but use figures for numbers 10 and above. Common exceptions to this rule include a 5-year-old girl, 3 percent, 6 cents; another common exception is that a number at the beginning of a sentence should be spelled: Twelve program offices and all 10 regional offices think OPA is a pain in the wazoo.

Passive/Active Voice
Use active voice as much as possible. Writing is much more lively and interesting to read in active voice. Passive sentences are often, although not always, written in past tense, and the actors are obscured. For example, "mistakes were made." By whom? Active sentences are strong, clear, simple and credible.

> *Passive:* "A cleanup plan will be issued this summer."
> *Active:* "EPA will issue a proposed cleanup plan this summer."

Plain Language
Along with all federal agencies and departments, EPA must use plain language in our communications with the general public and those specialized groups to which Agency communications are often directed. Plain language is communication your audience can understand the first time they read or hear it. Plain language is defined by results—it is easy to read, understand, and use. Additional guidance is available from the General Services Administration's Language Network on the Internet at www.plainlanguage.gov. (See also below in Key Elements of Structure.)

Regions
Most readers don't know what "Region 1," "Region 2," etc. mean, so explicitly list states or use regional descriptions if appropriate (e.g., "EPA New England"). For example, "Region 5 (IL, IN, MI, MN, Ohio, WI)." Also, use "EPA regional offices" instead of "EPA regions."

Spelling - One Word or Two?

Cleanup
The noun and adjective forms are "cleanup;" the verb form is "clean up." Do not use "clean-up."
> For example:
> "The cleanup will take six weeks."
> "Workers will clean up the site in six weeks."
> "The cleanup work will take six weeks."

E-mail
The *AP Stylebook* specifies e-mail rather than email. Also correct are e-book, e-business, e-commerce, etc.

Ground water
Ground water is preferred over groundwater as both adjective and noun; avoid the hyphenated ground-water.

Listserv
Again per the *AP Stylebook*, it's listserv, not listserve or list serve.

Online
One word, not hyphenated.

Stormwater
One word, not hyphenated.

Words that include "Web"
One word or two? It's "Web site" and "Web page," but per the *AP Stylebook*, it's webcam, webcast, and webmaster (Also note which words should be capitalized).

Titles

For clarity, consistency, and to respect the needs of bibliographical databases, titles should be restricted to two levels: one main title followed, if required, by one sub-title. In references, the division between the main and subtitle is signified by a colon; on covers it is indicated by spacing down one-half line and shifting to a lighter weight (sometimes a smaller size) of the same typeface. For purposes of clarity and easy reference, one of the key words in the title should appear at the beginning or as near it as feasible. For this reason, use generic phrases like "Report to Congress" and "Guide to federal activities" in subtitles, not the main title.

Writing for Kids

Anyone developing a site for kids, students and educators should contact the Environmental Education Web Workgroup (EEWW) (http://www.ttclients.com/eeww/index.htm) to involve the EEWW in the development of the site. Anyone preparing environmental education materials (Web, print or multi-media) should obtain a copy of Environmental Education Materials: Guidelines for Excellence, published by the North American Association for Environmental Education (NAAEE). NAAEE is a network of professionals and students from more than 50 countries around the world.

The executive summary of this NAAEE publication stresses the following points:

Fairness and Accuracy: Materials should be fair and accurate in describing environmental problems, issues and conditions and reflect the diversity of perspectives on them. The material should reflect sound theories and well-documented facts and present a balance of differing views. Diversity should be emphasized and learners encouraged to explore different perspectives.

Depth: Materials should foster awareness of the natural and built environments, an understanding of environmental concepts, conditions and issues, and an awareness of the feelings, values, attitudes and perceptions at the heart of environmental issues, as appropriate for different developmental levels.

Emphasis on Skills Building: The materials should build lifelong critical thinking and problem solving skills that enable learners to address and prevent environmental problems.

Action Orientation: The materials should promote civic responsibility, encouraging learners to use their knowledge, personal skills, and assessments of environmental issues as a basis for environmental problem solving and action.

Instructional Soundness: Rely on instructional techniques that create an effective learning environment. Offer different ways of learning, including interdisciplinary techniques, and create activities that allow learners to build from previous knowledge. Connect the learners to their own everyday life experiences.

Usability: The materials should be well designed and easy to use, clearly and engagingly written, adaptable for a range of situations, have life spans extending beyond one use or year, and should be accompanied by support information for the instructor.

Words and Structure – fixing some common misteaks and errores

(NOTE: The following are cited because they are among the most common, not because they are the only or the worst mistakes. These and other occasionally vexing use issues are also covered in the *AP Stylebook*.)

Affect/effect
"Affect" is normally a verb. "Effect" is normally a noun. For example:
"Acid rain affects trees."
"Acid rain's damaging effects include weakening trees."

The only use of "effect" as a verb is to mean "to cause" or "to bring about" as in "EPA will effect change through a new program." It is usually better to say accomplish, perform, produce, generate, make, etc.

Bad/badly
"Bad" pertains to a thing, including a condition or state of being (He is a bad man. He is bad. How bad is it? Sour milk tastes bad.)
"Badly" pertains to an action (He performed badly.)
When your fingers are too cold, they feel bad; but when they are numb, they feel badly.

Bay/bay
When bay follows a name of a particular bay the word "bay" is also capitalized. In continuing to refer to it specifically, even without the full name, do not capitalize it.
Galveston Bay was damaged by the hurricane, but restoration of the bay is continuing. No other bay was as badly damaged.

Contractions and pronouns and verbs, oh my.
Our – Hour – How're
Their – There – They're
Were – We're – Where
Your – You're

Compose/comprise

"Compose" means to assemble or constitute
"Comprise" means to encompass (specifically encompass that which is already assembled)
"The infielders, outfielders, pitchers and catchers compose the baseball team."
"The baseball team comprises infielders, outfielders, pitchers and catchers."
"The baseball team is composed of infielders, outfielders, pitchers and catchers."
Things compose groups and groups comprise things.

Dispose

To "dispose" means to arrange, incline, or make ready. In contrast, "to dispose of" means to get rid of something. For example:

"The on-scene coordinator is disposed to clean up the site now"
"The on-scene coordinator will dispose of the hazardous material at an approved landfill."
Improper use: "EPA will dispose the hazardous material."

Good/well

"Good" pertains to a thing, including a condition or state of being. ("He is a good man. He is good. How good is it? Candy tastes good.")
"Well" pertains to an action. ("He performed well.")
When your fingers are warm, they feel good, but if they are sensitive, they feel well.

Figuratively/literally/virtually

"Figurative" means like, similar, resembling
"Literal" means exactly the same as stated
"Virtual" means approximating reality

Do not use literally unless you mean that a statement is exactly as you have said it. Example: It is literally impossible to say, "When I am here at the beach with you, I am literally in heaven," because you literally cannot be at the beach talking to someone if you have demised into eternity.

Impact

"Impact" as a verb is over-used. Use "affect" or "affected" instead. For example:
"The contamination will affect a large area" instead of "the contamination will impact a large area."
"The affected area …" instead of "the impacted area …"

May

(NOTE: Following is one of the most common misuses in EPA communications. Do not use it, no matter how often you see it used in other media, or even in some dictionaries.)

"May" means permission or free choice. It may not be used in place of can, might, could, or would.
"I **might** catch the flu. I **may** get a flu shot."

Migrate

This is an intransitive verb; you do not migrate something; you just migrate. "Migrate" as a transitive verb is computer techno-talk. If you are using it in that context – only – you may do so…if you insist.

Example (correct): Geese **migrate** to Canada
Example (wrong): Grandmother will **migrate** the silverware to the buffet
Example (techno): The computer division will **migrate** the data to the buffer

That/this (those/these)

It is greatly preferable to use **that** to indicate something which has already been mentioned, and to use **this** to indicate something upcoming…not yet mentioned or introduced. **That** refers the audience back to something; which they have already heard and, so, say, basically, "Oh, yeah…*that* thing." **This** will tell the audience that something is yet to come, and they will say, basically, "Oooh, I better pay attention. Conventional wisdom says that this creates immediacy. If the audience expects something yet to come, when you are actually referring to something already past, immediacy is very possibly displaced by confusion.

> Example: The injured need help. That is the reason for my volunteer work (Audience: "Ah, I understand.")
> Example: The injured need help. This is the reason for my volunteer work (Audience: "What is? ")
> When the antecedent of this is very close, using this is acceptable, but almost never as clear as *that* .

That/which

Be careful using "which" in place of "that." "*Which*" tells something about the subject that is not absolutely necessary:
> "The project, **which** is six weeks overdue, is still with the contractor."

In contrast, "that" provides necessary definition or restriction:
> "Let's review the project **that** is overdue." "Which" is always preceded by a comma; "that" never is

Waste

The term "waste" is inherently plural. Do not add an "s" unless you mean – and must specifically call attention to – different types of them. For instance: "hospital **waste** comprises various dangerous items," but, "solid and liquid **wastes** must be treated differently."

Punctuation Pointers

The *AP Stylebook* includes an entire chapter devoted to punctuation. We encourage you to read and learn this material. A few special notes follow about some of the trickier punctuation matters relating to:

- Apostrophes
- Commas
- Exclamations!
- Hyphens
- Periods
- Quotation marks
- Semicolons
- Series

Use of apostrophe: Examples: PCBs (to show plural, do not use the possessive apostrophe), EPA's policy (to show that it is EPA's policy).

Know the definition of the serial comma. It is the comma used immediately before a conjunction in a series of three or more items. The phrase *rain gardens, porous pavements, and green roofs* is written with the serial comma while the phrase r*ain gardens, porous pavements and green roofs* is written without it. Lawsuits have been filed over interpretations of documents based on the "missing" comma before the *and*, so this is not a minor detail. The *AP Stylebook* recommends against the use of the serial comma, but includes some exceptions, such as: Use commas to separate elements in a series, but do not put a comma before the conjunction in a simple series: The flag is red, white and blue. He would nominate Tom, Dick or Harry. Put a comma before the final conjunction in a series, however, if an integral element of the series requires a conjunction: I had orange juice, toast, and ham and eggs for breakfast. Also, use a comma before the final conjunction in a complex series of phrases: The main points to consider are whether the athletes are skillful enough to compete, whether they have the stamina to endure the training, and whether they have the proper mental attitude.

Use exclamation marks sparingly!! They are used extensively in comic books!! That tells you something right there!! In any case, if you want your audience to be excited and enthused, you will need to do it with words and ideas, not punctuation

marks!!

Learn about hyphens. Commas and hyphens are typically the most difficult punctuation concepts for people to understand. The purpose of the hyphen is to help your reader avoid ambiguity. If two words together describe one word and they come *before* the noun they are describing, the words are usually hyphenated. It helps the reader understand more quickly that the two words together describe the next word. **Example**: The free-form sculpture was beautiful. Without the hyphen, the reader might stumble while reading. Is it a free sculpture? What's a form sculpture? If you don't like hyphens, you can always rewrite your sentence. When adjectives come after nouns, hyphens are unnecessary. **Example**: The sculpture was free form and beautiful.

Periods are followed by one space, not two. AP style dictates one space after closing periods, except with initials, such as in C.S. Lewis. This is because desktop publishing programs automatically adjust for spacing after a period; however, typewriters and many word processing programs do not. Because most of us use computers and because we should be environmentally-friendly and not waste the space, EPA style is to use one space, not two, after closing periods.

Follow standard punctuation rules for quotation marks. Use quotation marks when quoting short remarks by other people or brief passages in publications. Remember to use appropriate punctuation. In dialogue, each person's words are placed in a separate paragraph, with quotation marks at the beginning and end of each person's speech. Periods and commas go inside quotation marks. Dashes, semicolons, question marks and exclamation points go inside quotation marks when they apply to the quoted material. They go outside when they apply to the whole sentence. Italics are sometimes used to highlight examples or to provide emphasis, although it is perfectly acceptable, perhaps even preferable, to use quotation marks to highlight examples. Single quotation marks are used for quotes within quotations.

Use the following rules to help you understand semicolons. Use a semicolon to join two independent clauses when the second clause restates the first or when the two clauses are equal in emphasis. Example: EPA scores vehicles according to fuel consumption and their environmental impacts; SmartWay-certified vehicles are the best environmental performers. Use a semicolon to join two independent clauses when the second clause begins with a conjunctive adverb (however, therefore, moreover, furthermore, thus, meanwhile, nonetheless, otherwise) or a transition (in fact, for example, that is, for instance, in addition, in other words, on the other hand, even so). Example: Going "green" now seems to be all over the news; in fact, a quick Google news search pulls up 95,000 results.

Use a semicolon to join elements of a series when each item in the series includes commas. Example: Recent sites of the Olympic Games include Beijing, China; Athens, Greece; Salt Lake City, Utah; Sydney, Australia; and Nagano, Japan.

Use proper punctuation for bulleted sections. AP uses dashes, not bullets, for lists in news stories that follow a colon. EPA follows the AP rule after the dash or bullet: capitalize the first letter and use periods at the end of each section. Example: You will need to present the following information:

- Your driver's license.
- Birth certificate.
- Passport.

Grammar Guides

Here are just a few of the more common errors with some thoughts about how to avoid them.

Agreement (pronoun/antecedent; subject/verb). Agreement in grammar means that singular matches singular, plural matches plural. Misuses in this connection often occur when there is some lack of clarity about whether a certain grouping of many things constitutes a single, collective idea. For example:

Pronoun/antecedent – Incorrect: If *one* is nervous, *they* should relax.
Correct: If *one* is nervous, *he* should relax.
Subject/verb – Incorrect: Linens are the department on the third floor, behind the escalator.
Subject/verb – Correct: Linens are the only things that I am washing today.

Combining *he or she* as a single phrase is clunky and awkward. If possible, make your subject plural. Learn when to use *you and I* versus *you and me*. If *between* is involved, it is *between you and me*. A simple rule to follow is *I* is used in the subject whereas *me* is used in the predicate, that is, after the verb. Examples: You and I will attend the meeting. She is going with you and me to the meeting.

Conjunction and preposition placement (*from beginning to end*). Conjunctions are words that connect distinct, but related words and phrases. They include: *albeit, also, and, because, but, for, consequently, however, moreover, nevertheless, or, therefore.* They can connect words as comparative or as contrasting. Traditional grammar does not permit their use to begin sentences based on the idea that, as connectors, the words being connected should do so within the same sentence. EPA style agrees with the traditional idea, but accepts the idea that, in some cases, it might be effective and useful communication to permit their use as opening words in sentences.

NOTE: Certain words that are most often used as conjunctions are simply not conjunctions in other contexts. For example:
- I will go to the grocery; however, I might stop at the laundry first. (conjunction)
- However large the amount, my salary is never large enough. (adjective)

See also under Punctuation Pointers: Ampersands, Commas, Semi-colons…entry has implications for the use of conjunctions.

Prepositions are words which indicate (conceptual or physical) place or position. They include *about, around, above, below, here, in, near, there* and many others. Traditional grammar does not permit their use to end sentences; however, ending sentences with prepositions is so common in colloquial usage that it can be accepted in writing occasionally. It might seem that a preposition is an appropriate word to end a sentence only because the sentence was not carefully constructed in the first place. If the dilemma seems to present itself, try – very hard – to write the sentence in strict formal English. You probably will find that formal use is just as easy to read and easier to understand.

Colloquial – *That is not a rule that I am aware of*.
Formal – *I am not aware of that rule.*
Formal – *That is not a rule of which I am aware*.
Colloquial – *Cairo is not a city that I have ever traveled to.*
Formal – *I have never traveled to Cairo.*
Formal – *Cairo is not a city to which I have ever traveled.*

Something of an outlier – occasionally in English usage, we find prepositions in a purely colloquial form to emphasize certain verbs. It is debatable whether such uses are truly prepositions and/or whether they are formal English in their use. Examples: *chew up, call out, fall down, figure out.* Seldom would the meaning of the verb be different without the *up*, the *out*, the *down*. The question is as much about the word being necessary as it is about it being correct. In autumn, the leaves fall down. Indeed. Where else? While we are on the subject, exactly how high does your food go, when you chew it… up?

Elliptical/incomplete sentences: Elliptical sentences are sentences which lack a core element (subject, predicate, object), but are entirely understandable from context. They are grammatically incorrect but can be highly effective in the right context.

Split infinitives. (i.e. Separating the infinitive word to from a verb with which it is associated) Example: "**To define clearly**" versus "**To clearly define**." EPA writing style does not consider this a *No-No*, but it is a *Seldom-Seldom*. Like sentence-ending prepositions, split infinitives are not so bad themselves, but often indicate a poorly constructed thought or sentence. If the splitter-words give the main verb a significantly higher meaning or emphasis, it is a good use. A worst case example: "We must strive to ably and well, within the powers of our highest resources always and effectively, as we are enlightened by wisdom, promote better writing."

Structure and Style Recommendations

This next section includes strong recommendations for EPA writers to follow.

Probably the most important quality in any writing is clarity. A few kinds of writing, fiction and some philosophy, intentionally place more burden on the audience to ponder the meaning; more likely in those cases, several levels of meaning. Seldom would that approach serve EPA. For most of our writing, clarity is paramount.

The notes in the earlier section about strategic planning have much to do with clarity. Strategic planning produces that most important ingredient in clear writing – it makes intent and message clear to the writer and ultimately to the reader.

Several structural points are key to clarity in writing and can be named as separate elements, but often cannot be identified separately in an actual finished communication product. Structure and style, themselves, are distinct, but related.

Key elements of structure are:
- Consistency, coherence.
- Direction, integration.
- Clarity, plain language.

There are many ways to build those elements into the communication product.

Be consistent. From small details to big ideas, strive for consistency. Use the same spelling, punctuation and capitalization rules throughout a product. **Example**: Using ENERGY STAR in some places and Energy Star in others is confusing to the reader. Write from the same voice and person, the one doing the speaking, the audience being addressed. Above all, stick to the point. You know how you have heard someone say, "But I digress." Well, don't.

Use parallel construction. You want your subject and verb to agree. **Example**: One tree is blowing in the wind. Two trees are blowing in the wind. Easy enough? This gets more complicated if you can't determine the subject. **Example**: Is either of the storm drains clearly marked? or Are either of the storm drains clearly marked? Is the subject either or storm drains? If you selected either, you are correct, and the correct verb is is. If you think your audience might believe you are mistaken, rewrite the sentence altogether to avoid the problem.

If you are writing complex sentences, ensure parallelism in each of your clauses. **Example**: Not Parallel: The production manager wrote his report quickly, accurately and was thorough. Parallel: The production manager wrote his report quickly, accurately and thoroughly.

Headlines or titles should reflect your publication's topic and draw in potential readers. The physical appearance of headlines and titles allow the reader to sequence the ideas that are being presented. Sub-headlines and section titles present a skeleton that reveals the structure of the communication. A main headline or title should set the main idea, so the subheads and section titles should follow. A movie script has a structure. Its sequence and scene headings are not

physically viewed by the audience, often not actually typed by the writer, but if they were to be read, they should reveal a coherent structure.

Write tight. Vary your sentence length, but aim for short sentences. If you can't avoid a long sentence, insert much shorter ones before and after the long sentence. Your primary job as a writer is to ensure that your reader understands your message. To some extent, the sheer discipline of trying to write short sentences will help you make them concise and succinct. There is nothing inherently confusing about a compound or complex sentence, but if a thought or thought sequence can be expressed in simple sentences, it is easier to follow.

Write in plain language. Many of the recommendations in this section are integral to writing in plain language, as required by a Presidential mandate in 1998. Plain language – in plain terms – is easy to read, understand and use.

No matter what the many applications and implications of plain language are for a particular product, do not forget the point at the beginning of this section – it is almost impossible to clearly communicate a muddled thought. Create a strategic plan. Know what you mean first…audience is likely to follow.

The above elements contribute to structure, but…

How to Structure Communications

There is no one-and-only structure to a communication. Once you have your direction and key points, the work can be structured in a variety of ways. Some of the most common examples are detailed here. In most cases, the structure that serves EPA best is called the hierarchy of interest. It begins with what is commonly called the lead (in journalism), the key selling point (in marketing) or, the main theme (in school).

That lead/selling point/main theme is the idea of greatest interest to the <u>audience</u>. Begin with it and expand on it. Do not just work it in somewhere. The people in your audience will want to know, first of all, why this communication benefits them. It is in your interest to tell them up-front why your material benefits them, why they should keep reading or listening or watching. Follow that pattern…explain to them the hierarchy of important points. Use subheadings liberally to help readers scan through your main points.

The hierarchy is not a strict top-down rating, but is based essentially on structuring the key points that the audience will want or need to take an action or make a decision.

Generally, at the end, you summarize the points (*summarize* is a sophisticated way of saying you repeat yourself) leading to…? Well, where exactly were you trying to lead them? To a decision? An action? What did your strategic plan contemplate?

In journalism, you might not have a complete summary, and you probably are not trying to get to a very specific end-point. Your goal is probably to transfer information on a topic of importance in such a way that your audience fully understands it. You might simply be saying (in effect), "That is where things stand, so far." The end-point in marketing is more definite and more action oriented.

There are other ways to structure communication. Generally, they do not work as well. They are the: chronological/historical, dramatic and logical.

Chronological structure was an ideal way to teach and learn writing in school. It makes sense. It is easy to follow. It

structures an entire story from start to finish. It does not, however, usually serve the interests of busy people in the modern world who want to know immediately what they need to know and why they should know it. On the other hand, for a reader who truly must know every detail about a subject, all with nearly equal importance historical structure can work particularly if knowing the sequence of events is the crucial element.

Dramatic structure does not *make* a story dramatic. It has certainly been demonstrated beyond doubt to be the best way to structure fiction and engage the emotions. It usually begins with a factual setting and builds gradually to a (dramatic) climax. Somewhat self-evidently, it does not serve the general purposes of writing for EPA. It would be great if we could reach our audiences like the many powerful dramas – movies, novels, TV shows – that have involved EPA over the years, but other than the occasional human interest story, it is seldom a viable format for us.

Logical structure means logical throughout. In other words, you begin with a premise or set of premises and construct an argument that leads to a conclusion. If your audience cares enough to follow it, or needs to convey the argument to others, it is a useful structure. Rhetorical structure is a form of logic. It poses questions and then answers them. Questions are sequenced logically to lead to a summary point. It is the underlying communication structure in our legal system, especially courtroom procedure. All communication should be logical in the sense that one point naturally follows from another, but logical structure is a more formal approach. Even in this case, the *lead-into-the-lead* is to tell the readers why they this matters to them.

Style (as the word is used here in a more limited sense) is complementary to structure. Tone is perhaps the single most dominant characteristic of style.

Tone is difficult to define objectively, largely because it is not objective; it is subjective. Tone is measured by how the reader or listener *judges* or *feels* about the communicator and the content. That derives partly from how the communicator meant the audience to *judge* or *feel*. If it turns out wrong, the tone was probably improperly written or conveyed. The tone must be appropriate to the content; otherwise it is, almost by definition, confusing. Daily life is full of examples of tone not matching message. Saying good morning in a snarling gruff tone is essentially confusing and raises the question, "What did he mean by that?" Among the somewhat objectively definable techniques that help create the correct tone are:

- Affirmation
- Person
- Voice

Use positive statements wherever possible. For example: *Do not close the valve* versus *Leave the valve open*. Positive statements are easier to understand. When your eyes scan across Do not, your mind instantly backs up and pauses, Wait, what am I NOT supposed to do? Oh yeah – don't close the valve. It is clearer, but, just as a matter of human nature, positive statements convey a tone to which people respond more…well, more positively.

Use active voice. Active voice is much more interesting to read than passive voice, and the actor is less likely to be left out. **Example**: The Anacostia River was cleaned up. Instead, write: Office of Water volunteers cleaned up the Anacostia. If you want to motivate people to take an action, it makes sense that the active voice is more…well, more actionable.

Write in second person where possible. It is the friendliest of tones, most interactive and easiest for your audience to read and understand. **Example**: Turn off the water when you brush your teeth. Second person is usually, but not always, appropriate. Press releases and technical documents are usually written in third person. Topics which might involve strong negative reactions, which might be too personal, are better written in third person. Examples are descriptions of dire health effects or direct warnings of criminal enforcement actions.

More Elements of Style

There are other elements of style that largely stand alone as individual aspects of good communication to practice, or in some cases avoid.

Borrowed ideas, borrowed style. This is not plagiarism, but is akin to it. Certain styles or modes – usually popularized via mass media, celebrities or particularly engaging television commercials – have a cache that would seem to "work" for some other organization or outlet. Those popular approaches probably are effective because they display some degree of creativity. Now that someone has thought of it and done it, whatever other qualities it has, it is no longer creative. To that degree it is unlikely to work. Even if "borrowed" despite that fact, there is no particular reason to think that it will work for a different organization anyway.

A specific application of the borrowed idea is creating communications that mimic some popular advertising campaign or approach. This is problematic in three ways. First, there is nothing really creative about copying, no matter how well it might be done. Second, the mere fact that a commercial is popular does not mean that it is selling. Advertising is full of campaigns that won awards for their artistry while the client did not see an increase in sales. If you can generate an action or a decision by being entertaining, do it; if not, do not. Third, there is simply no good reason to believe that an approach which works for one organization will work for another, especially if its appeal is uniqueness. Trying to be like someone else is the opposite of unique.

No clichés. No jargon. No hip. (Exception: If you are using those constructions humorously, they are alright; just make sure that the humor is intentional and effective.) The biggest problem with explaining this category of word formulas that masquerade as ideas is that it is an almost infinitely large topic.

Cliché is possibly the least offensive of these devices; it has, as the cliché goes, stood the test of time. Some are useful, but an impulse to use one should be met with at least an attempt to create something new instead.

Hip (the latest thing, cool-talk, etc) cannot possibly be good mass communication as a general practice. If an expression or speech pattern is meaningful to a large segment of the population, it is, by definition, not hip. The very point of being hip is to be in front of, or apart from, the pack, not with it. In turn, trying to be hip, and failing to do so, invites – and invariably receives – ridicule. Ridicule is close to the perception of dishonesty as the least desirable outcome for a communication.

Jargon includes techno-talk, shop-talk and random, stylized forms of bad grammar. Maybe the worst is jargon compounded with pretentiousness. The idea behind most jargon is that it is a code through which one communicates with the secret clan of people who "talk that way." At best, this is a dubious proposition, but, even if true, it is no more effective than plain language because people "talk that way" too.

Repetition/Redundancy. They are not the same thing. Redundancy is unnecessary repetition. In journalism, most repetition is considered redundant. Outside that arena, repetition, in itself, is an effective communication tool in teaching and a cornerstone of effective marketing and salesmanship. (See below: Bias For Action).

Self-aggrandizement. Always wrong, and in some cases such activity is against the law. It is not an easily enforceable law, but the federal government is prohibited by statute from using appropriated funds to communicate in the self-interest of an Agency, its officials or the aggrandizement of its budget. Communication must be for the public interest. That might be difficult to define, but not difficult to know the obvious opposite. A leading example is *Acknowledgements* in publications (see earlier section on this topic). It can be useful to tell an audience, as a statement of fact, which offices (occasionally which individual staff) prepared a document. It is inappropriate to *congratulate, dedicate or thank*. EPA is publishing its work. We have no reason to thank or congratulate ourselves for doing our work. We should, as warranted, identify

those who can provide information about the subject or take direct responsibility for the contents of a communication. Unpaid consultants or reviewers may be acknowledged by name or affiliation. Contractors should not be acknowledged as individuals but, as appropriate, cited on a title page with a contract identification number; the firm may be named, but it is not necessary to do so.

Reports seem especially susceptible in this area. Reports should report fully, not just *accomplishments* and *achievements* to the exclusion of *mistakes* and *failures*. Along with being self-aggrandizing, a report which covers only the positive aspects of our work is being dishonest merely by calling itself a report. It is not a report; it is a promotional piece.

Producing reports, as fully-designed, elaborate publications, is not necessary. If the public should be informed of work progress, a report can almost always be copied or printed in one color and posted on a Web page without elaborate design. If a publication or video is to present *success stories*, as examples of work that can be profitably emulated by others, the success should be an activity which EPA helped, not did. Outside organizations, by definition, cannot learn how to be a federal agency. Success stories in themselves are good communication. We can legitimately serve the information transfer function about them because we have unique access to them.

Simple can be complicated. The fact that someone is new to a topic implies the need for a basic explanation of the topic. It does not mean that every audience of beginners wants only the beginner lesson. It is the nature of our work at EPA that everyday citizens from every part of our society get involved in our work. To assume that the newcomer does not want a lot of information can be varying parts of wrong, condescending and unproductive. Know your audience. Know what they want and need. People who have just learned of an imminent lethal environmental threat to their community almost certainly do not merely want to skim the highlights of the matter. Significant environmental actions of the last few decades, which transformed our environment and our view of it, were led by "ordinary" citizens who became experts. Do not shortchange our potential community leaders with, "They are not interested in all that. They just want a nice simple explanation." A lot of information does not mean complex, does not mean technical. Simple, yes; meager, no.

Subjunctive The *subjunctive* (the verb mode that expresses possibility, wish, hope, choice…*can, could, may, might, should, would*) has its place, but like all communication must mean something that actually means something. To say, without elaboration or definition, "This chemical *can* cause cancer" is at best useless (i.e. not actionable) information; at worst a scare tactic. If it *can* cause cancer, the reader must be told the circumstances, or the probability under which that statement is true. If we say "EPA *might* enforce these regulations" the audience must know if we might not. It must not be used to create an appearance that the Agency is providing information, when it is merely providing speculation.

Process Suggestions

Several suggestions and helpful hints to help you avoid mistakes frequently corrected during product review:

Brainstorm, outline and consider your audience. Start with a brainstorming session where you outline your main message and supporting ideas. Consider your medium. If it is a fact sheet, it should be one page in length. Consider your audience. Will humor or a story work for your audience? If so, we encourage humor and creativity as long as it could not be deemed offensive or inappropriate.

Use your resources. As you are creating your concept, remember to involve your product review officer. Your program reviewers are great resources and should be involved from the concept stage of development. They help communicate your ideas to the reviewers in the Office of Public Affairs as you develop your product. For a list of product review officers, see: http://www.epa.gov/productreview/pros.html.

Include your main message in paragraph one. Lead with a clear purpose statement that includes your intended audience.

Readers should know up-front what exactly you want them to learn in your publication. In a press release, this is called the lead. Journalists try to include the "who, what, when, where, and how" of the situation in the first sentence of a press release or news story. Example: Before heading outside in a heat wave, you can check the air quality index where you live at: http://airnow.gov/index.cfm?action=airnow.local.

Always spell-check and proofread for typographical errors. Regrettably, spell-check does not catch everything. Examples: it does not know the difference between there/their/they're, affect/effect, your/you're, our/are, then/than, its/it's, and loose/lose. That's why it is critical to proofread your work, and ask others to proofread your work. If there are errors you want to avoid, you can replace them in Microsoft's autocorrect feature, and save yourself embarrassing moments. In Word, access the Tools menu and then click and complete: AutoCorrect Options, Replace, With, Add, and Ok.

Edit, edit, edit. Double-check the spelling of names, organizations, and acronyms. Double-check your references, footnotes, and sources. Ask at least one other person to edit your work. In your final review, look for unnecessary words and delete them. As long as you're spell-checking, use the Flesch-Kincaid readability scale in Microsoft Word. Access the Tools menu and then click on: Spelling and Grammar; in the Grammar tab, check Show Readability Statistics. After you complete a spell-check, the last screen will give you the readability statistics, including the grade level. This readability scale bases the grade level of the writing on the number of words per sentence and the number of syllables per word.

Use the *Associated Press Stylebook* **as your primary reference.** *The Associated Press Stylebook and Briefing on Media Law* (Basic Books, New York, NY, 2007) is EPA's standard style guide. Appendix 3 of the *Policy and Implementation Guide for Communications' Product Development and Approval* on EPA's Office of Public Affairs Web site includes exceptions to the *AP Stylebook.* Bookmark: http://www.epa.gov/productreview/guide/app3. html#language.

Use *Webster's Dictionary* **as your spelling reference**. *Webster's* is EPA's official spelling guide, and the first spelling is preferred (*Merriam-Webster's Collegiate® Dictionary, Eleventh Edition,* Merriam-Webster, Springfield, Mass., 2003). Bookmark: http://www.m-w.com/

The Substance of Style

Any EPA product must communicate something about the Agency, as a whole – something on the "list" of our essential qualities. At the top of such a list should be these:

Accuracy / Honesty / Openness. In cliché terms, it "goes without saying" that EPA communications must be honest, but, in fact, it does not go without saying; it should be, and is, stated explicitly: Honesty is the primary constituent and quality that must be in, and the basis of, all EPA communications. Some people might think of style merely as a synonym for appearance. In communications, style is the overall recognizable form of that which is being presented. Our communication style is honesty. It should conform to the traditional concept of the "courtroom" standard – the truth, the whole truth and nothing but the truth.

EPA has a special and difficult obligation to do more than just mean well and be straight with people. In work that is grounded in law and science, being right on the facts, is crucial. In public communication getting it right means getting it so that the audience gets it right. If writing for the public is wrapped in perfectly accurate legalism or high technology most of the audience will not get it right, because they will not get it at all. This does not mean walking a fine line between two difficult areas; it means eliminating the difficulty. As challenges to communicators go, that is about as tough as it gets, and we are expected to meet that challenge

Two process steps in achieving accuracy – **coordination** and **verification** – are also significant as values in themselves. The breadth of EPA work across geography, population and subject matter can make it difficult to know that our communications are consistent with one another. Even the most sincere effort to be truthful and accurate can appear to contradict or conflict with a communication from some other part of the Agency. The appearance of contradiction, in itself, is a failure to communicate as well as possible. There are methods and systems to facilitate that necessary coordination – the Communications Product Review process is one. We must use them fully to ensure that we not only avoid inaccuracy, but avoid even the appearance of it.

We should think of verification in two ways. First, we must always verify the accuracy of our messages as we write. Second we should verify to the audience what we write. Citing sources, detailing research, explaining the basis for our statements, attests to our openness and honesty, but it has some important practical aspects, too. EPA is often challenged in the public forum. It is gratifying that the public trusts us, but they should not be tested to do so. They should know how and why we are equipped to make the statements that we do. In turn, that enables each person in the audience to become a confident communicator of that message.

Action. Most of the communications that are addressed in this stylebook should reflect the public nature of our work. Yes, we are accountable to the public, but unlike many other agencies, we are obliged to go beyond just being accountable; we must involve the public directly in our work. Most citizens will never be directly involved in the work of most federal agencies to help launch a missile, conduct foreign trade negotiations or capture a smuggler, but for tens-of-millions protecting the environment is a daily activity. Using household chemicals safely, using fuel efficiently, recycling, knowing how ensure drinking water purity, in a thousand ways citizens are our partners in this work. Our communications must have a bias for action to involve people at the level that they desire and that we need. Sometimes just giving information is sufficient, but conveying it a way that it easily can and will be used should be the rule. More often, the goal should be action and public involvement. That principle in an earlier section about telling the audience how and why a communication will benefit them…this is mainly what that means.

Inclusiveness. This is largely the blending of the two points immediately preceding. We must convey information that everybody understands. We must convey information that everybody can use. Earlier we said to avoid clichés, but this is a good one – democracy in action. There are no people or groups who are special in the scope of our work. In communications terms we should target specific audiences, but we must target the universe of them. That is not just a thought about democracy; it is an action item for our Agency.

Logo Guide

Logo Guide: Table of Contents

A Couple of Preliminary Ideas About Logos

Logos and a variety of similar graphic symbols are discussed in this Graphics section because they are essentially visual, however, it is central to an understanding of such symbols that they are not simply design elements. Logos communicate large ideas, in most cases a set of related ideas.

Logos can fulfill many overlapping functions as graphic design, identifier, sign, symbol, signature, label and others. To understand the design elements of EPA communications, the most fundamental aspect of the logo should be understood at the outset – the signature and label of the Agency; it identifies a product as ours. An EPA logo says and signifies that EPA produced (or co-produced) the material.

As you might put your signature or photograph on something to identify you, EPA uses its seal and logo in the same way. For that same reason, we insist that it be used in some standard fashion, so that people can predictably, reliably, and easily know that something is our product, and represents us, that we, in turn, stand behind it.

The identity of people, of organizations, vouches for and stands for the credibility of their statements and products. When we sign and label our products and statements with our seal or logo – be it in partnership with others, or alone – that directly relates to our credibility. It is to be regarded and used with utmost seriousness.

A key consideration in understanding the use of the EPA seal and logo is strictly prescribed by Administrative Order. An Administrative Order is the most serious form of procedure by which a federal agency determines its own internal operations. This is not a guideline, recommendation or procedure; it is called an Order because it is an order. There are actually several orders which prescribe various applications and uses of the EPA identifiers. When you want to learn more, go to: http: //intranet.epa.gov/rmpolicy/ads/transorders.htm. Start by scrolling to the key directive 1015.2A. Another is 1015.1B.

In the following pages, you will see the meaning and application of those ideas, as well as the practical application and use of all identifiers in the context of graphic design, formatting and production.

Ethics and EPA Logo Usage

Fundamentally, every EPA employee is bound by the Standards of Ethical Conduct for Employees of the Executive Branch, 5 CFR Part 2635, which includes specific prohibitions against misuse of position:
1: Appearance of governmental sanction: An employee shall not use or permit the use of his government position or title or any authority associated with his public office in a manner that could reasonably be construed to imply that his agency or the government sanctions or endorses his personal activities or those of another (5 CFR 2635.702 (b)).

2. Endorsements: An employee shall not use or permit the use of his government position or title or any authority associated with his public office to endorse any product, service, or enterprise except: in furtherance of statutory authority to promote products, services or enterprises, or as a result of documentation of compliance with Agency requirements or standards or the result of recognition for achievement given under an agency program of recognition for accomplishment in support of the Agency's mission (5 CFR 2635.702 (c) (1) and (2).

Taken together, these provisions mean that employees cannot allow the use of the EPA logo to endorse any non-federal product, service or enterprise. It is important to know that the Agency's many voluntary programs do not have any statutory authority to endorse. Only Energy Star enjoys specific statutory authority to promote products. The other voluntary

programs do not, so employees cannot allow the use of these voluntary program logos for promotional purposes by outside entities, including the voluntary program partners. If the partnership program marks include the line at the bottom "A US Environmental Protection Agency Program", then those marks SHOULD NOT be used by the non-federal partners.

Other Rules and Orders

Any **EPA Graphic Standards System**

EPA Order 1015.2A establishes the EPA logo and requires all EPA visual communications to follow a common "EPA Graphic Standards System". That system is designed to:
- Clarify Agency policy regarding logos, labels and other graphics
- Inform Agency stakeholders of the process and strategy for graphic unity
- Guide internal and external stakeholders on our logo standards

This logo guidance describes the approval process for proper use of the EPA logo, existing program or partnership logos and/or graphic identifiers. The process seeks to:
- Eliminate competing, inconsistent or ineffective logos
- Ensure that outreach correctly communicates the intended Agency message and identifies EPA as the organizational home or program sponsor
- Reduce unnecessary work and expenditure for Agency communications

Make clear that some existing logos, such as sub-Agency organizational identifiers, are prohibited by EPA Order 1015.2A (EPA Seal and Agency Identifier) and will be discontinued

This guidance is intended to be instructive in enhancing our public outreach. Agency communications must comply with EPA logo standards. Communicators must confer with Product Review Officers and Web Content Coordinators from content through design and placement. As with all aspects of the Product Review process, OPA is required to ensure an effective product and process, including notification of division and office management.

The EPA Graphic Standards System stresses "themes" for programs, partnerships, projects or events that need a specific identity, but one that has a clear EPA identity. Products are required to use both the approved program or partnership logo and the EPA logo as illustrated on pages 48 and 49. If the print area restricts the use of the two logos together-- products are required to use the signature line. As emphasized above, you should consult with your Product Review Officer and Web Content Coordinator at the concept stage as you consider whether and how to use appropriate graphic identity.

Product review, the EPA outreach development and approval procedure, includes these principles on logo usage:
- Firmly established interagency partnership logos previously approved by OGC are grandfathered as long as they continue to be effective programs.
- Ensure that an EPA signature line or EPA logo is used with all current approved program or partnership logos (see pages 48 and 49). The only exception to this requirement would come if OGC determines that in a specific case it could create a legal issue.
- OPA will assist communications and public affairs staff (in particular Product Review Officers in the product development and Web Content Coordinators) in Program and Regional Offices in the product development and approval processes. A case-by-case review by OGC is necessary to ensure proper trademark searching and licensing has been done and that no ethics standards will be violated.
- Follow logo guidance to ensure that logos have integrity, are consistent and not defaced.

PREFERRED USE

The EPA logo is the primary logo for internal and external communication. Using these two versions (preferred and alternate) of the EPA logo will generate equity in the symbol, assure consistency across products, and maintain a unified image. It is important that the EPA logo always be reproduced with consistent high quality (in vector file format when possible). When using other symbols or graphic elements in addition to the EPA logo, be careful not to create a disjointed image of the Agency and cause stakeholder confusion.

ALTERNATE USES

United States Environmental Protection Agency — Signature below

United States Environmental Protection Agency — Signature beside

> **!** For best results, the preferred presentation of the logo should be used on products that do not have enough space for the logo with text (pens, name badges, lapel pins, Web site banners, etc.).
>
> It may also be used on partnership publications in the presence of other logos. Without the text underneath, the logo should be made the same relative size as the other logos on the page.

United States Environmental Protection Agency — Signature beside on one line

CLEAR SPACE

United States Environmental Protection Agency
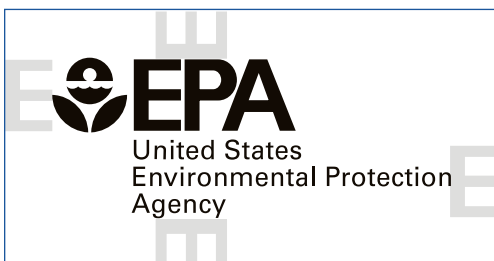
To ensure high visibility and an uncluttered presentation, always maintain clear space around the EPA logo. To determine the clear space, measure the width of the "E" in the logotype. The clear space will change depending on scale.

It is important that all parts of the EPA logo be readable. For this reason, the EPA logo should not be reproduced at sizes any smaller than those specified here. There are no maximum size restrictions as long as the clear space requirements are met.

MINIMUM SIZE

EPA — 0.1875"

PMS 362

The entire logo must appear in black, gray, any uniform color or knock out white on a dark background. The flower and text may NOT be different colors, nor may the flower itself contain more than one color.

PMS 660

! The relationship between the flower portion of the logo and Helvetica type should never be shifted or adjusted.

Always use approved artwork when reproducing the EPA identity. Available for download on the intranet at: epa.gov/protrac

Process Black at 70%

Process Black 100%

Knock out on a dark color

! Incorrect Use

1 Never delete elements of the logo.

2. Never add elements to the logo.

3. Never distort the logo.

4. Never add a color to any element of the one-color logo.

5. Never blur or fade the logo.

6. Never incorporate other text into the logo.

7. Never change the typeface of the logo.

8. Never position the logo on a busy area of an image.

9. Never place an image over the logo.

ACCEPTABLE

U.S. EPA

U.S. Environmental Protection Agency

United States Environmental Protection Agency

UNACCEPTABLE

USEPA

US EPA

U.S.E.P.A.

Too close

Office of ...

Basic Elements • EPA Seal Usage

ACCEPTABLE

> ⚠ Per EPA Order 1015.2A, the EPA seal is reserved for official communication, flags, and building signs. For more information on the EPA logo and seal, go to EPA's Product Review Web site: www.epa.gov/productreview.

The EPA logo has replaced the seal as the identifier on marketing and communication outreach. The seal is reserved for official communication for the Administrator's Office, legal and ceremonial use, speaker podiums, awards and plaques. Promotional outreach is not an award nor official communication and therefore may not use the seal.

SAMPLE WALLPAPER & PODIUM
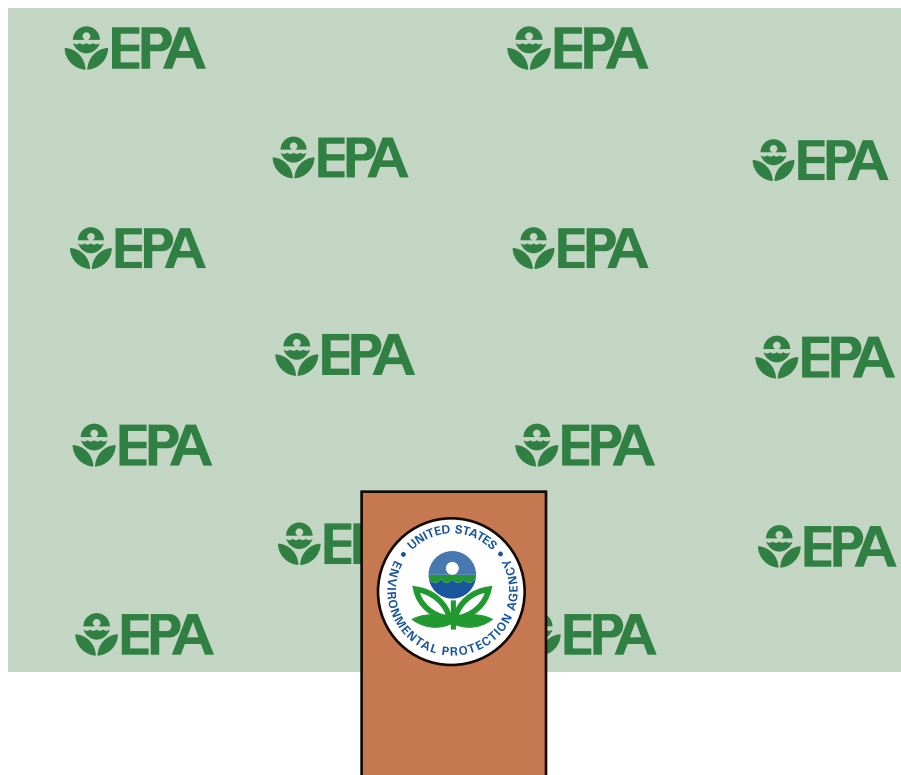
EPA Logo Policies

Logos and similar graphic identifiers can be powerful visual representation of an organization, program, partnership or event. Their proper use, consistent with logo standards that promote a unified EPA brand, is therefore mandated in outreach products, whether printed or electronic. The absence of an obvious association dilutes the public's understanding of and trust in the Agency's important mission and accomplishments.

> ! The EPA logo is the primary logo for internal and external communication.

EPA Order 1015.2A establishes the EPA logo and requires all EPA visual communications to follow a common "EPA Graphic Standards System." This system is designed to:

- Clarify Agency policy regarding logos, labels and other graphical representations
- Inform Agency stakeholders of the strategy and process for logo unity
- Guide the internal and external stakeholders on the Agency's logo standards

This logo guidance describes the approval process for proper use of the EPA logo, existing program or partnership logos and/or graphic identifiers. The process seeks to:

- Eliminate competing, inconsistent or ineffective logos
- Ensure that outreach correctly communicates the intended Agency message and identifies EPA as the organizational home or program sponsor
- Reduce unnecessary work and expenditure that could be spent to promote the agency and its programs
- Make clear that some logos in existence, such as sub-Agency organizational identifiers, are prohibited by EPA Order 1015.2A (EPA Seal and Agency Identifier) and will be discontinued

This guidance is intended to be instructive, not punitive, in enhancing EPA's public outreach. Agency employees and contractors are required to comply with EPA logo standards, and to confer with product review officers and web content coordinators from concept through design and placement. As with all aspects of the product review process, failure to comply will be handled by OPA and OGC as needed case-by-case, including notification of division and office management.

Touchpoints

Aligning "touchpoints" with one clear identity/name equals consistency. Every touchpoint is an opportunity to strengthen the Agency name and communicate the Agency message.

Printed Publications

Manuals

Reports

Handbooks

Direct Mailers/Postcards

Posters

Newsletters

Fact Sheets

Brochures

Packaging

Promotional Giveaways

Conference Materials

Certificates/Awards (internal & external)

E-mails (graphics, headers & footers)

Business Forms

Letterheads/Biz Cards

Signage

Site Signage

Exhibits/Billboards

Presentations

Vehicles/Boats

Uniforms/Hard Hats/Hats/T's/Vests

Customer Service/Employees/Field Work

Press Headers

Written Word/ Speeches

ID in Office Environments (interiors/exteriors)

Web sites/Banner Ads/Podcasts/Videos

DVD Interface

Video productions (headers & credits)

Photo Ops (signage, banners & backdrops)

Podium Seals

Announcements/Press releases

Touchpoints

A clearly visible EPA logo is the identifier for all forms of media. Logos and templates for various products can be found on the EPA Graphics Workgroup QuickPlace http://epaquickplace1.rtp.epa.gov/.

If you are a contractor or a visitor who would like to request an account, please fill out the online account request form and identify your EPA sponsor.

Printed Products

PowerPoint presentations

On-Air graphics and video

Exhibits

Web sites

EPA Logo Classifications

In the rare case that a program must meet alternative Office of General Counsel requirements that prohibit the EPA identifier, please consult your Product Review Officer and the Office of Public Affairs.

A) EPA Logo & ceremonial Seal
Not to be altered. Represents all staff programs, offices & regions. (see page 8 for more on usage)

A U.S. EPA & U.S. DOE Partnership

A U.S. EPA & U.S. DOE Partnership

B) Partnership Logos

Cross-Agency Effort with other federal or state agencies. Identify with EPA logo or EPA signature line in a prominent location:
"A U.S. EPA & _____ Partnership"

A U.S. Environmental Protection Agency Partnership

C) Approved Logos - managed exclusively by EPA
Identify with EPA logo or EPA signature line in a prominent location: * A U.S. EPA Program/Partnership/Tool"

*See next page for more examples.

D) Future Policy for EPA outreach
Use EPA logo and the design of the piece to develop a theme *without an additional logo* but with color, typography and graphic elements.

Samples of EPA program & partnership logos with signature line

A U.S. Environmental Protection Agency Program

A U.S. Environmental Protection Agency Program

A U.S. Environmental Protection Agency Program

A U.S. Environmental Protection
Agency Program

A U.S. Environmental Protection Agency Partnership

A U.S. Environmental Protection Agency Program

A U.S. Environmental Protection Agency Partnership

A U.S. Environmental Protection Agency Program

Print examples for firmly established partnerships and programs

Outreach materials for firmly established partnerships and programs must have a visible EPA logo or EPA signature line.
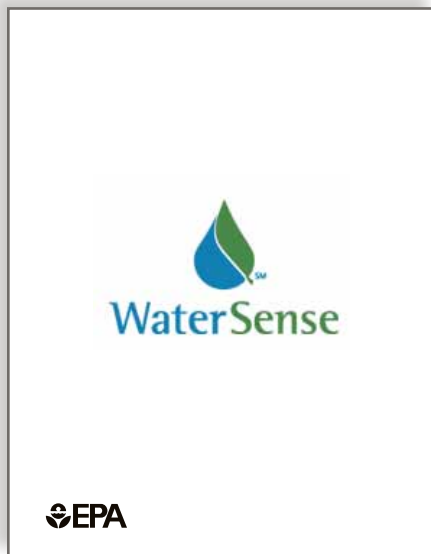
Applications

Samples of Publications with EPA Logo as Sole Identifier

When creating outreach materials: use professional quality images and clean and clear composition. These examples show a variety of applications that maintain the EPA identity.

Air Initiative brochure example ▲

Quarterly Municipal newsletter example ▼

Green Building brochure example ▼

Environmental Education ▲ poster example

Event materials: EPA hosted Climate Change forum with co-sponsors ▲

Energy booklet example ▲

Graphics Guide: Production & Replication

Graphics Guide: Table of Contents

Overview

This section of the EPA Stylebook describes standards for the creation and development of graphic elements of most EPA public information materials. In covering most of the categories of graphic elements, we, in turn cover a broad range of considerations and activities associated with producing those elements. Specifically, this section includes:

- Such basic aspects of graphics work as typography, layout and composition
- More advanced levels of work, such as color scheme, appropriate uses of charts and graphs and effective employment of illustration and photography
- The relationship of design to overall message content and the message content of design, itself
- On many levels, the general category of graphics work involving logos and related symbols, especially the use of official EPA identifiers in our own communications and those done in cooperation with other governmental and private organizations

Design is, itself, communication and carries a message. While good graphic design is aesthetically pleasing its function is to communicate, not simply decorate or attract attention to verbal content. In typography, graphic considerations literally cannot be separated from text, but in all respects verbal and design elements should work together. Variously they complement or supplement a message that might not be conveyed by either element alone.

Perhaps least interesting, but most important, is that good graphic design, generally following an appropriate style, is a preeminent factor in the economics of communication. Good graphic design saves money in the direct costs of production and the often much higher costs of time and labor.

As with most of this stylebook, the information in this section is helpful in itself, but also should be read in connection with the EPA Communication Product Review process.

General Guidelines

Sometimes applying general principles can be a bit of a balancing act, but there is no real conflict among any of the general guidelines for actual production work in our communications. They are:
- Effective communication – the totality of this manual is about that
- Efficiency / cost efficiency
- Good quality / best professional practices
- Ecological soundness including sustainable production practices
- EPA Administrative Orders and Policies (detailed all throughout this manual)
- Government Printing Office (GPO) rules and guidelines (NOTE: GPO Stylebook is being revised through 2008-2009. EPA is not obliged to follow it in all cases, but as a matter of policy follows closely because it represents an excellent compendium of good production practices.)

By federal government standards EPA does not have a large budget, so considerations of cost-efficiency and cost-effectiveness must be relatively high on our scale of priorities.

In sheer numbers, most EPA communications products tend to be print materials. No medium is better than another in any general way. The best medium and format is the one that is suitable and appropriate to convey its message to its target

audience in an effective and efficient way. Print is an important focus for our work.

Internally, the Office of Public Affairs and the Printing Management Office closely coordinate their work through the Communications Product Review process and the EPA Printing Guidelines. As an EPA communicator, you should know the procedures and processes of those offices before undertaking a public communication print project.

Other media have fewer broadly established requirements in federal agencies. Largely the requirements for EPA communications are the same as the professional and commercially accepted standards of the various media from promotional products to broadcasting to exhibits and displays.

Color Printing vs. Black and White

Many color considerations from a production standpoint are based on the assumption that materials are produced on a printing press. Most large quantity printing jobs are – must be – done that way. Color considerations from a design standpoint, or for small quantity jobs (e.g., color photocopying) might not apply, at least not as strictly, or in the same way. A tricky element that is involved here is that work which begins in desktop publishing software, perhaps intended as low-volume production, might become more involved, difficult and costly if you decide to take it to large-scale production later.

Using color is an important consideration for large quantities that are to be run on a press. In those circumstances the cost is usually much higher to produce in color. The simple addition of one or two colors will increase costs noticeably. The use of full color (See glossary: process color, four color) will raise costs even more noticeably.

A principle that should apply from a design standpoint that can affect production significantly is that the use of color should promote effective communication. Mere cosmetic or decorative qualities are among the very least important reasons to employ color. Where they are the only reasons, to the extent that they increase costs, they are reasons to choose a less colorful design.

Note that standard black (or blue) ink is a color, so, for example a two color job would be black plus one other color; not two colors in addition to black or blue.

See Section 18-2 of GPO's Printing and Binding Regulations for categories of multi-color printing as having "demonstrable value" to the government.

As a rule of thumb, if an audience is seeking the information contained within, and needs no further motivation to read it all, nor direction to specific parts of the document, then one color probably will suffice. That is a simple principle that applies mainly to instances in which color is used simply to guide the eye of the reader and does not function in terms of content, as such. If color is needed for clarity, identification, or efficiency, or if the audience is likely to want the information but unlikely to seek it out, or read it easily then two or more colors could be appropriate, especially if the document concerns public health or consumer issues.

This "rule-of-thumb" guidance is not official policy and should not be relied on without confirmation from EPA's Printing Management Office.

If more than two colors of ink are required on a page, a written justification is to be submitted to the Agency printing officer citing the applicable GPO criteria described above.

Requirements and Printing Regulations

Use of Employee Photographs

Photographs of EPA staff should be reproduced when they:
- Relate entirely to the transaction of public business, and are in the public interest
- Relate directly to the subject matter and are necessary to explain the text
- Do not serve to aggrandize any individual
- Are in good taste and do not offend proper sensibilities
- Are restricted to the minimum size necessary to accomplish their purpose
- Illustrate employees actually engaged in an act or service related to their official duties

Unless a publication is specifically designed to highlight employees (such as an awards ceremony program), "mug shots" of executives, managers or staff should not be included in publication. Employees may be photographed, as appropriate to the message, in performance of their duties. In fact, that can be an excellent message in the right context.

Despite the restrictions cited above, the use of illustrations to enhance the communication of information in publications is encouraged. The following guidance should prove beneficial.
- When using one or two colors, photographs—especially photographs of people—look best if printed in black ink
- When using multi-color printing, all colors must be specified as proportions of process inks (Cyan, Magenta, Yellow and Key or black) and not using numerous Pantone ink colors; specifying with Pantone ink numbers could result in using more than four colors of ink
- Keep illustrations as simple and uncluttered as possible

Electronic-Design Print Publishing

The goal of this section is to provide best practice guidance to originators who create publishing products via desktop computers. No specific instructions are given for creating the perfect electronic file, but suggestions are provided to simplify the process and minimize potential problems. The art and science of producing printed publications using commercial offset lithography or the digital method requires different structured files. As an example, the colors produced by these reproduction means are very different and often limited compared to desktop printing. Understanding the requirements and limitations of commercial reproduction will definitely affect the final cost.

Platform: Electronic files should be created using either the Macintosh OS 10.2 system or later or Microsoft's Windows OS 2000 or XP. The Macintosh is the primary platform used by the print publishing industry and thus using this process often results in fewer problems and typically with lower overall costs. Either platform is acceptable, however.

File Submission: Files can be submitted on any commercially-established media, such as a CD or DVD. If submitting a DVD, make sure that the format of the DVD drive used by the end user is the same format as the DVD drive used for recording. Note: DVD-RW drives only record on –R and –RW discs, and DVD+RW drives only record on +R and +RW discs. Make sure your blank DVD disks are compatible with your drive. The minus format is the most popular format for Windows users and is almost universally accepted by Mac users as their standard DVD recordable format.

Commonly-Accepted Publishing Software: The following programs are the preferred programs of the commercial printing industry. Files created using the following software output with fewer problems than files created in programs not designed for print publishing (such as word-processing software, i.e., Microsoft Word®). Other programs could be used, but unless they support prepress functions (e.g., CMYK and Pantone® color, trapping, bleeds, crop marks and color separation), problems will likely occur. Originators who use programs other than those listed below should supply high-resolution, press optimized PDF files (press quality, CMYK, and embed all fonts when saving the files as a PDF) and also include the native files on the CD.

Macintosh Platform
- •Page Layout: Adobe InDesign, QuarkXPress, Adobe FrameMaker
- •Drawing/Illustration: Adobe Illustrator, Macromedia FreeHand
- •Image Manipulation: Adobe Photoshop

Windows Platform
- •Page Layout: Adobe InDesign, QuarkXPress, Adobe FrameMaker, Adobe FrameMaker
- •Drawing/Illustration: Adobe Illustrator, Corel Draw, Macromedia FreeHand
- •Image Manipulation: Adobe Photoshop

File Formats for Print: Furnish files in native format. For example, using a Windows version of InDesign, the file will be saved with an .indd extension. Using the save feature of most publishing software creates a native application file.

If the Adobe Acrobat Portable Document Format (PDF) file format is used, the submitted file must be created properly. The PDF must contain embedded fonts, graphics, color data and layout structure. Also, design elements must contain appropriate information, e.g., color space, fonts, resolution, in order to be output properly. PDF files created specifically for web use might not output well for print publishing due to resolution, color and other issues. PDF files for press output must be created using the appropriate settings in Acrobat Distiller, not through the PDFWriter. PDF files created using the PDFWriter are not acceptable for print publishing. Information for instructions on creating high quality PDF files can be found at many Web site, including Adobe (www.adobe.com), PDFZone (www.pdfzone.com) and PlanetPDF (www.planetpdf.com). Information is also available from GPO's Institute for Federal Printing and Electronic Publishing. Also, please note that bleeds cannot be obtained from a PDF file.

PostScript files, commonly referred to as print-to-file or print-to-disk, are similar to PDF files in that they are designed as self-contained, platform independent, print-driver files, e.g., contain fonts, graphics and layout structure. The majority of GPO's vendors prefer not to receive PostScript files because they often contain output limitations specific to the print driver used to create the file. Also, if PostScript files are submitted, EPA will be responsible for any PostScript errors encountered during output.

File Formats for Deliverables: Whenever a document has been printed through GPO, EPA can request that a digital deliverable be furnished to the Agency. This deliverable can be formatted for online use or for future reprinting. It is up to the originator to determine the desired format for the digital deliverable. Sample formats are listed below.

Hyper Text Markup Language (HTML): This is the most common format for creating web pages. HTML can be exported from most programs used for layout. HTML files are readily searchable and are best use for publications that do not require a high degree of document structure (e.g., formatting, graphic fidelity and page structure) and are not required to visually match the printed version. If links, formatting, graphics/animation, hand coding, etc., are required, these features can be time consuming and costly.

Acrobat PDF: This is the most common format for presenting documents online or subsequent reprinting. PDF files are relatively easy to create and when printed to an office printer, product design and page formatting are maintained. However, the type of digital deliverable PDF that is requested is determined by the desired use—press or online.
- •Press PDF: A press-optimized PDF should be requested for subsequent printing. These PDF's contain embedded fonts, graphics, color data, and layout structure.
- • Online PDF: A screen/web optimized PDF is used for online viewing or printing from an office printer, NOT FOR PRESS.

Fonts: PostScript Type 1 fonts is the printing industry standard. The entire font set (Macintosh—printer and screen fonts;

Windows—.pfm and pfb files) should be provided. Only include the font sets used in the job and not your entire font collection. Font files that contain features such as kerning and tracking MUST be provided. Fonts such as True Type and OpenType fonts may be used, but most commercial print vendors prefer files using PostScript fonts. Do not mix font types.

One way to avoid font problems with graphic files is to convert all type matter in the graphic to either outlines, paths or curves, depending on the software. Keep in mind, however, that once converted to outline/path/curve, text is very difficult to edit.

Printing in Color: Any file requiring four-color process separations must be submitted in CMYK only. Do not submit color files in RGB. Any file requiring spot-color separations should be defined by the proper spot-color Pantone number and identified as spot colors for output. When printing in grayscale black ink, any color information should be removed.

Note: When RGB (red, green, and blue pixels) is converted to CMYK (cyan, magenta, yellow and black) for process printing, a color shift will occur. RGB colors are used for electronic display (computer monitor, TV, projector screen, etc.), NOT FOR COMMERCIAL PRINTING. Word processing software such as Microsoft Word, PowerPoint, Excel, and Corel WordPerfect use RGB and are not designed for CMYK output.

Note: When specifying Pantone spot colors, be aware that "coated" Pantone colors are not the same as "uncoated" Pantone colors. Since EPA only uses uncoated paper, be sure that all specified Pantone numbers are uncoated, i.e., Pantone 462U and not Pantone 462C.

Color visuals that are furnished with the electronic files which have been output from office printers are not a good representation of the final printed product due to the physical differences between ink in traditional printing; inks, toners, and dyes in digital printing; and the colorants used in desktop color printers and their calibration. Also, printing proof colors might not be a good representation of the actual colors on the printed product due to the final product being printed on recycled paper.

Scanning Images for Digital Printing: Scan all images (color and grayscale photographs) at a resolution of 300 pixels per inch at an input-to-output size ratio of 1 to 1. For example, a 3 x 5 inch original photograph that is to be printed at 3 x 5 inches should be scanned at 300 pixels per inch, where the same photograph to be printed at 6 x 10 inches should be scanned at 600 pixels per inch. All other enlargements and reductions are similarly proportional. Scan all line art as bitmap images with a resolution between 800 and 1200 pixels per inch, based on the same 1 to 1 ratio. Scanned images should be saved as uncompressed TIFF or EPS files. Images should be cropped, rotated, and scaled prior to placement into the page layout file, which is best accomplished in the image manipulation program, not in the page layout program. Also, working in layers whenever possible with raster images makes corrections much easier to achieve.

If using a digital camera to capture images for print publishing, avoid using the compression schemes built into digital cameras. If compression is necessary, use the lowest possible (highest quality) compression option available. Always save images from digital cameras as TIFF files before editing and submitting for printing. Also be aware of color shifts with images from digital cameras. The RGB color data (JPEG) could cause the on-screen view and color printer appearance to differ from the printed output. Requesting contract color proofs should show any color shift problems.

Linking Files: All files must be linked properly. If using Adobe InDesign, use "Place" to establish external links. Using the Edit menu to "cut and paste" graphic files between programs could yield unacceptable results—cutting and pasting color images from Microsoft Word, PowerPoint, Excel, can cause output problems such as color shift and system crashes. If graphic files have been modified in an originating program after placement in the page layout file, they MUST be updated (relinked).

Proofing: The furnished visual (output from desktop/office printer) is used as a general guide, not as a proof. It is not a

suitable proofing medium due to the physical differences between: (1) ink in traditional printing; (2) inks, toners, and dyes used in digital printing; (3) colorants used in desktop color printers; and (4) calibration of the color printer. If the furnished files contain any errors, print vendors are not obligated to verify that their output will match the supplied visual. For this reason, it is wise to get proofs for all jobs supplied on electronic media.

Extraneous Images: Do not include non-imaging files or files that are "for position only" on the production disk. If they have been included, be sure to indicate that they DO NOT PRINT. Non-printing images can cause confusion and might cause the file to fail.

Gradients: To avoid problems with banding, gradients should be properly created. Gradients should generally range from 3 to 97 percent for offset printing (avoid using 0 and 100 percent), where digital printing requires a higher percentage in the highlight.

Tint Screens: Never use fine-detail tint screens (under 5 percent). Fine-detail screens appear acceptable when imaged to desktop printers (300-600 dpi) but virtually disappear when imaged at higher resolutions. As a general rule, start with 10 percent and increase in increments of 10 percent. If possible, avoid any screen higher than 90 percent.

Rules: Never use rules that are less than .5 point. Hairline rules appear acceptable when imaged to desktop printers (300-600 dpi) but virtually disappear when imaged at greater resolutions.

Bleeds: Bleeds are to be provided by the originator and must be included in all files that image off the final printed page. As a general rule, allow 1/8 inch minimum for any bleed.

EPA Policy Regarding Paper Stocks

All printing paper products used by EPA are to meet the standards of the "New Environmental Standards for EPA Paper and Publications," which was set forth by the Deputy Administrator in his memorandum of January 2001. This standard for paper requires the use of 100 percent recycled paper with a minimum 50 percent post consumer fiber content. Printing will be done using vegetable-based inks and process chlorine free paper. The Deputy Administrator also directed that all EPA internal and external publications prominently display the recycled logo with a statement indicating the recycled paper content, processed chlorine free, and using vegetable-based ink. EPA documents and publications must be printed on paper stocks that can easily be recycled. Therefore, litho-coated, matte-coated, and dull-coated paper stocks are not acceptable for use in EPA documents.

Paper Savings and Standard Paper Sizes

Because of the costs of paper, shipping, mailing and printing, in most cases copy should be single-spaced. All publications should be printed front and back. Consider appropriate paper-saving techniques, such as combining tables and figures with text on one page and reduce and crop figures and photographs to a smaller size consistent with clarity. The Joint Committee on Printing established standard paper sizes for Government printing. A few sample sizes mandatory for EPA publications include: 17 by 11 inches, 8-1/2 by 11 inches, 5-1/2 by 8-1/2 inches, and 8 by 3-5/8 inches. These sizes can be cut from larger sheets with a minimum of waste resulting in cost-savings publications.

Use of Government Bankcard for Printing/Photocopying

Use of the government bankcard for printing/photocopying services is prohibited unless a waiver is approved by your local Photocopying/Printing Manager or your local Printing Control Officer. Also, Title 44 USC, Section 501, limits sole-source procurement actions to $1,000 or less. Printing/photocopying services include (but are not limited to) any image transferred to paper, plastic/vinyl, CD/diskette duplication, color copying/digital copying, black and white photocopying/digital photocopying, liquid ink digital copying/printing, Journal reprints/page charges, and offset printing.

In Headquarters, a wavier request for bankcard purchases must be submitted in writing, either by memorandum or e-mail, to the Agency Printing Officer and include: (1) number of pages and number of copies of the document, (2) estimated printing cost from outside vendor, and (3) schedule required. In a field location, the request must be submitted to the local Printing Control Officer. If the request is for Journal article page charges and/or reprints, an EPA Form 1900-8, Procurement Request, is to be included and must also indicate the title of the article and the name of the publishing Journal.

A determination will be made as to whether the materials can be produced either by the Government Printing Office (GPO) or EPA's in-house copy center, while maintaining the required schedule. If it is determined that neither GPO nor EPA's in-house capabilities can meet the required schedule, a waiver will be granted with the cost not to exceed $1,000.

In-House Copy Center Duplication

The following guidelines apply to copies made in EPA's in-house copy centers. EPA contractors and grantees are to also follow these guidelines when furnishing EPA with their findings for the use of a department or agency. Under no circumstance can these copies be used for distribution to the public.

The Joint Committee on Printing has ruled that producing less than 5,000 units of only one page or less than 25,000 units in the aggregate of multiple pages for the use of a department or agency will not be considered to be an item of printing. This is for black and white copying only. Color copying, which must fall within the justification for use of color printing, has a maximum total aggregate of 100 units.

Peer Review

The Joint Committee on Printing of the United States Congress requires that Federal agencies have initial publication rights. Only after peer and administrative review can EPA decide whether to publish a report or waive its initial publication rights. As required by EPA Order 2200.4A, all communication products issued in the name of the Agency must undergo review and clearance before publication and external distribution. Designated officials must certify that all such materials have been adequately reviewed. It is important to note that the review process applies not just to EPA employees, but also to contractors and others performing research or publishing statements on behalf of EPA.

Anchor Elements

Cover design should consider both the purpose and the appearance of the publication. Physical specifications are usually dictated by product size, intended use and audience. **Consult on-site mailroom staff and obtain templates from www.gpo. gov.** Certain anchor elements, however, are required on all documents that are distributed to the public.

Publications which use self-covers must include all of the anchor elements listed below.

Anchor elements:

EPA Logo with Signature: The EPA logo with signature is an acceptable identifier. The official EPA logo does not entail the signature (ie. The full Agency name). The logo is available on the Internet at: http://www.epa.gov/productreview/guide/seal_logo/index.html

An additional identifier/logo can be included on the front cover for products jointly authored by EPA, such as an assistance recipient or another federal agency, when identifiers of all authoring entities should be included. All identifiers should be the same size; external identifiers should never overshadow EPA's identifier.

EPA strongly discourages the creation of identifiers for programs, offices, initiatives, etc., because EPA should be the primary organizational reference for all EPA efforts, rather than a lower-level organization. Before beginning to design an identifier, consult with your appropriate Product Review Officer.

EPA publication number: This number is assigned by the National Service Center for Environmental Publications (NSCEP) or through your organization's Technical Information Manager's tracking system.

Date: Always include the month and year of publication/ending date of research results.

EPA portal address: Always include EPA's portal Internet address on the cover, not the publishing office's Internet site address. The Office's Internet site can be included on the back cover or last page if desired. Example EPA portal address: www.epa.gov

"Official business penalty" statement

EPA LOGO:

The EPA logo should be placed equal distance from the bottom and left side of the page.

INFO:

Trade Gothic Light

OPTIONAL PROGRAM INFO:

Trade Gothic Light
Align: Left and bottom margins

RULE:

1/2" from each edge,

1 pt. thickness

ELEMENTS:

Office, Program or Region

Publication Number

Date

RECYCLED INFORMATION

When applicable, the recycling logo and the following text should be displayed on a document's back cover.
"Printed on 100% recycled/recyclable paper with a minimum 50% post-consumer waste using vegetable-based inks."

If you are printing in-house a document that uses another post-consumer percentage (higher than 30%), or if the document is processed chlorine free, this should be included.

0.3125"   Printed on 100% recycled/recyclable paper with a minimum of 50% post-consumer fiber using vegetable-based ink.

0.125"

Qualified paper mills and recycled symbols can be downloaded at www.epa.gov/productreview

Front Matter of a Book

Title Page
Center everything on the title page using initial caps only (e.g., Handbook, not HANDBOOK).

Notice/Disclaimer
Put a peer-review notice, disclaimer statement if needed, and a copyright notice on page ii of the front matter of a report.

Foreword
The foreword is often of a scope similar to that of the author's preface but is provided by the sponsoring Laboratory.

Abstract
Two types of abstracts are used in EPA documents:
- •The indicative (descriptive) abstract tells readers what the report is about.
- •An informative abstract reports the hypothesis, methods, results, and conclusions of research detailed in the text.

Limit the abstract to 200 words.

In extramural reports, include the following information as part of the abstract in a prominent location:
This report was submitted in fulfillment of (grant or contract number) by (contractor or X grantee) under the (partial) sponsorship of the United States Environmental Protection Agency. This report covers a period from (date) to (date, and work was completed as of (date).

In in-house reports, include the following information as part of the abstract in a prominent location:

This report covers a period from (date) to (date) and work was completed as of (date).

Preface (Optional)
The author's own statement about the work is called a preface. A preface might include such information as the reasons for undertaking the work, the research method (if it might bear on the reader's understanding of the text), or the limitations within which the subject was studied.

Contents
Always begin the table of contents on a right-hand, odd-numbered page. Include preliminary pages (front matter), main headings of the document, appendices, and the pages on which they appear. You may use dotted leaders to aid readability of the contents. Indent and subordinate any subheadings. Avoid extra spacing between major sections when it would cause contents to have a short overrun onto the following page.

Lists
Include a list of figures (figures, maps, charts, illustrations) and a list of tables only if considered helpful or essential. For each figure or table, give its number, the caption as it appears in the report, and the page number. Avoid extra spacing when it would cause a list to have a short overrun onto the following page. If lists of figures and tables are short, combine them on one page.

Acronyms and Abbreviations
Assemble and define acronyms, symbols, and abbreviations if doing so will aid the reader. Abbreviations or symbols for uncommon or specialized terms should also be given in parentheses following their first use in the text. Thereafter, use only the abbreviation or symbol. Consider using two columns when the list exceeds one page.

Acknowledgments

Limit acknowledgments to peer reviewers and organizations that aided the development of the publication in a major way. EPA employees, as civil servants, should not be mentioned. The mention of any contract employee or contractor name is not appropriate. However, acknowledgment for the work done by a person for a specific work or section of a document is allowed.

Body of Report

Text

Start each chapter with a dropped heading. Do not include any blank pages. Often chapter 1 is an introduction, but if your report is short, it may not require a separate introduction.

Figures and Tables

Reference all figures and tables in the text. Put figures and tables as close as possible to their mention in the text (but not before they are mentioned). When a report contains only a few pages of text and many figures or tables, place the figures or tables in numerical sequence after the text. Spell out the words "Figure" and "Table" in the text and captions. Put captions in boldface type. Do not put a box around figures or tables. If it is necessary to place figures or tables in a horizontal or landscape orientation on the page, center them on the page so that the top is to the left margin and the bottom to the right margin.

Figures

Treat figures consistently throughout the document, and use them only if they relate directly to the subject matter and are necessary to explain the text.

- Make sure that line weights and shading are consistent throughout the report. Line weights must be greater than 0.25 point width to make them reproducible for printing. Do not use small details, such as tiny circles that will fill in or bleed during printing.
- Reduce figures too big to fit within the margins. Make lines heavy enough to remain legible after you reduce them.
- Make callouts within the figure clearly legible. Do not submit hand lettered graphics. Crop or mask photographs to eliminate insignificant details. Eliminate unnecessary border frames. As far as practical, place callouts in a figure horizontally, unboxed, and near the item identified. To ensure easy readability, maintain high contrast.
- Number figures consecutively, using the chapter number or appendix letter as a prefix and starting figures in each chapter or appendix with 1 (e.g., 1-5 is the fifth figure in Chapter 1; B-1 is the first figure in Appendix B).
- Put a caption under each figure flush left following the figure number. Capitalize only the first letter of the first word and any proper nouns or chemical or mathematical symbols, and close with a period.
- If illustrations are used, be sure they are sized and placed within your document as required, 300 DPI.
- Do not use footnotes in a figure; make this material part of the caption or text.

Tables

Organize tables as simply as possible for easy reading. Use a software package that allows for the creation of columns and rows. Make the format of tables consistent throughout the publication. If the tables require stacking more than two rows of headings (vertically) and several columns (horizontally) the table is probably too complicated for the reader; split it into two or more tables, reorganize, or eliminate some of the data. Center columns under headings, and align on decimal. Leave space between horizontal entries, and do not use vertical lines.

Number tables consecutively, using the chapter number or appendix letter as a prefix and starting tables in each chapter or appendix with 1 (e.g., 1-5 is the fifth table in Chapter 1; B-1 is the first table in Appendix B). Place a caption flush left above each table after the table number. Capitalize the first letter of each word except articles, coordinating conjunctions, and prepositions. Do not use a closing period.

When a long table is continued on two or more pages, repeat the table number and "Continued," but not the table caption, on all the following pages (e.g., Table 3-6. Continued). Repeat the column headings with rules on each page.

Footnotes in tables are an efficient way to present peripheral information. Use superscript, lowercase letters, starting from the top of the table and proceeding from left to right. For a table that includes mathematical or chemical equations, use symbols instead of letters for footnotes because of the risk of mistaking letters for exponents in the equation. Use symbols in the following order:

*(Asterisk or star), † (Dagger), ‡ (Double dagger), § (Section mark), # (Number sign).

References
In the text, reference the following kinds of material:
- •The source of a significant and original statement.
- •The source of information not sufficiently familiar so that most readers would know it or be able to find it readily.
- •The sources of controversial matter and opposing views.

Present references in an accurate, uniform manner at the end of each chapter or together as the last chapter of your document. Cite references using either the number system (putting numbers in superscript or parentheses) or the "author-year" system (e.g., Blinksworth 1987). Use a style consistent with that of any scientific or technical journal or society. Include all essential elements of a reference: author(s) (or organization), title, source, identifying numbers, publisher, place of publication, date, pages.

Since personal communications are not usually available to the public, there is little point in using them in a list of references; if they are used, however, include them in parentheses within the text; for example, "(Cavanagh, Jeanne. Letter to author, 1990.)" In citing personal communications, obtain permission from the person to be quoted.

Back Matter
Appendices
Appendices contain supplementary, illustrative material, original data, and quoted matter too long for incorporation in the body of the report or generally relevant but not immediately essential to an understanding of the subject.

- •Start all appendices on the next available page. (If the report ends on page 47, start appendices on page 48.) Treat each appendix title as a dropped chapter head.
- •Divide the appendices into Appendix A, Appendix B, etc., depending on the kinds and amounts of material used. These divisions should not be arbitrary. A close relationship must exist among materials compiled within any given appendix.
- •List all appendices in "Table of Contents."

Glossary
If a glossary is included, list technical terms or terms that might not be readily known. A need for a glossary depends on the intended audience for the report.

Bibliography
Bibliographic entries provide supplementary sources for information on the subject of the document. Present this literature, which has not been cited in the text, in a manner consistent with the references.

Index
An index lists in alphabetical sequence names, titles and subjects appearing in the text. The value of any nonfiction book is enhanced by a well-prepared index. You can find instructions on indexing in most style books. Two of note are the CBE Style Manual, Council of Biology Editors, (available from Council of Biology Editors, Inc., 11 South LaSalle St., Suite 1400, Chicago, IL 60603; telephone 312-201-0101, fax 312-201- 0214) and The Chicago Manual of Style, University of Chicago Press, Chicago, IL 60637; fourteenth edition (ISBN 0-226- 10389-7) published in 1993.

Types of Communication Materials

The materials described in the following section are for public audiences – that is anyone outside our own staff. Some of the individual categories are mainly oriented to technical material, but all of them can and do include non-technical, public material. As you read the production guidelines in the following sections, it will help you keep a distinction in mind about our audiences.

We print hundreds of different documents every year for very limited and specialized audiences. The audience members are largely in technical work, but the document content is accessible to, and occasionally sought by, more general readers. Our work often becomes the source material for other publications that produced in the private sector. We print a somewhat smaller number of different documents each year for much larger, more general audiences; the press runs being of considerable volume.

The production requirements for the specialized audience materials are, themselves, more specialized. They frequently tie presentation and format specifications to content so closely that the two cannot easily be separated in terms of pre-production preparation.

The Assistant Administrators, General Counsel, Inspector General, Associate Administrators, Regional Administrators, and the Administrator's Staff Office Directors are the responsible officials for the substance, form, and policy implications of all materials originating in their respective offices. These officials must establish internal review procedures and controls to assure the high quality of their publications and issuances and assure that all such materials have been adequately reviewed.

Research Reports

The research report is a book-length presentation of the best of EPA's research findings. These reports are normally the most authoritative results of a research project on a critical area of interest in which the Agency is involved. A research report will fit into one of two broad categories: investigative or expository.

In a standard investigative report, results and conclusions, the evidence to support them, and the interpretation of that evidence are the most important inclusions. The background of the project and the methods used should support the results and recommendations. Structure the body of an investigative report as follows:

1. Introduction
2. Conclusions
3. Recommendations
4. Methods and materials
5. Results and discussion
6. References

In the introduction, focus on the hypothesis or problem that the study tests. Place the conclusions and recommendations before other matter in the body of an investigative report, because this allows the reader ready access to the full scope of the project. Methods, results, and discussion may be interwoven or addressed separately, as logic dictates.

An expository report sheds additional light on a topic or an area of high interest about which information is lacking. It is more informal and discursive in nature than an investigative report in the sense that its structure is not bound by the scientific method. Its organization is, therefore, looser than that of the investigative report; however, where possible, use the same format elements as the investigative report.

Weigh the text of a research report in favor of explanatory copy, and do not include large volumes of backup and unedited data, repeatedly-used figures of government or other organizational forms, or verbatim reprints from or transcripts of other printed information sources (e.g., the Federal Register). These inclusions would detract from the classic format of the book, run up the cost excessively, and are more appropriately referenced as secondary sources than printed. Footnote or reference

all background materials where appropriate to enable the reader to locate them in the library, through the national Technical Information Service (NTIS), or through the appropriate information databases.

The effective use of appropriate referencing and footnoting techniques is absolutely necessary to increase the credibility of the document and fulfill the purpose of the presentation. Careful documentation shows that a research project has been thoroughly investigated. Referencing systems vary among scientific disciplines. Whatever system you use, be consistent and make each reference complete.

Project Reports

Most EPA research is documented and made available to the research community in a project report. Project reports are required when: (1) neither a journal article nor an EPA research report is produced or (2) the journal article or EPA research report published is incomplete in terms of fully documenting the project or would require additional background data to survive rigorous scientific challenge. NTIS is the major distributor of project reports.

Manuals/Handbooks/User's Guides

In preparing these materials, use straightforward and precise language. To ensure that concepts or procedures are clear, use tabular material and graphic illustration as needed. Three types of application guides are described below.

- A manual is a comprehensive description of a technology (to solve an environmental problem). It guides users through creation, construction and maintenance of a technology or technique.
- A handbook is a collection of information, statistics, data and techniques that are accurate and relevant to a particular subject area.
- A user's guide explains and describes, step by step, how to employ a procedure, piece of equipment, model or program.

Limit the contents of the work to that information required to inform the reader. Eliminate unnecessary details, appendices and pages to reduce primary and secondary reproduction costs and to expedite review, approval, printing and distribution.

Fact Sheets

Fact sheets are used to provide information about an issue, project or activity to someone who might have limited knowledge of the subject. They should be limited to one or two pages in length and focus on highlights or the issues of highest importance.

Acronyms, jargon and technical terms should be avoided. If such terms must be used, define them first. Write clearly and use bullets as appropriate. Assume the reader will not have a technical understanding of the issues at hand; write as if presenting a talk to non-experts, not for a journal article.

While these are not requirements, here are some content suggestions based on the rather particular nature of fact sheet use:
- What is the issue or what is being studied?
- What are its uses and significance?
- Why was this research conducted?
- What organizations are involved in the issue or study? How was the study conducted?
- Provide a brief, non-technical description of the study while avoiding procedural details.
- What are the major milestones and what are the next steps?
- When appropriate, what health concerns are there?
- What are the policy implications?
- How are the results or conclusions being used by the Agency in policy?
- Title of the report or journal article, expected online and print publication date, and any other relevant information

about the publication.
- •Contact person and telephone number.

Proceedings
A proceedings report is usually derived from the presentation of a paper and from the questions, answers, and general discussion at conference sessions.

If the paper has resulted from an EPA-funded project, include the following in a prominent location:

This paper has been reviewed in accordance with the U.S. Environmental Protection Agency's peer and administrative review policies and approved for presentation and publication.

Journal Articles
EPA encourages the publication of research results in the open scientific literature. In academia, government and the private sector, the independent peer review achieved through the journal article publication process enhances scientific credibility and contributes to the establishment of scientific excellence. Each journal has its own style and requirements that must be observed when articles are prepared and submitted.

Book Chapters and Published Papers
Publication of research as a chapter in a volume addressing an area of environmental protection usually offers an author space not available in a journal article for the inclusion of additional data or information. Chapters also are used frequently to provide a review of the state of knowledge in a scientific or technical area of environmental importance.

Published papers or articles allow researchers to communicate at the peer level and attain visibility and credibility for EPA. A paper is the written text of a presentation delivered before a scientific peer group. It becomes a published paper subject to EPA peer review if it will appear as one of the following:
- •A preprint (a handout given before proceeding starts)
- •A paper in another organization's proceedings, or
- •An article in a non-peer-reviewed journal or book published outside of the Agency.

The book editor or the organization sponsoring the proceedings may provide instructions for chapter or paper preparation.

Print Promotional and Collateral Materials (see Glossary: Collateral Materials)
This is a large and general category that includes the familiar public items such as brochures, pamphlets and posters.

The materials in the general category of folder (i.e. folded material) are usually printed in landscape (horizontal) orientation on one of two paper sizes: (1) 8-1/2 by 11 inches, folded twice to provide three panels; or (2) 8-1/2 by 14 inches, folded three times to provide four panels. Posters are typically formatted to finished sheet of 17" x 21" or 17" x 34". Booklets and brochures are most often printed in portrait (vertical) orientation. This category of material requires the closest examination for effectiveness and cost-efficiency. It offers great possibility for creative expression, but must be scrutinized to ensure that a given aspect or element contributes to communications effectiveness beyond mere visual attractiveness.

CD Duplication and Jewel Case Inserts
The contents of a CD must be reviewed, cleared and approved following the same guidelines as for any other official communication product. CD duplication/replication is done through GPO.

Two CDs are required: (1) one CD contains the files to be duplicated, and (2) another CD contains the printing files (for the CD label and jewel case inserts). A CD label must include the title, EPA logo with signature, EPA publication number and date. If the label is to be printed in more than two colors of ink, approval by the Agency Printing Officer is necessary

before the CD can be submitted to GPO. If jewel case inserts are requested, the front insert is to include the EPA logo with signature, but the EPA publication number and date are not necessary. The bottom inlay with spines, is to include the EPA publication number and as much of the title as possible, on one line on the spine. If more than two colors of ink are required, approval by the Agency Printing Officer is necessary. Preproduction proofs of both the CD and any printed materials will be requested.

Promotional Materials (durable goods items) (see Glossary: Promotional Product)
(For complete information about procedures and applicability, refer to EPA's Promotional Communications for EPA, Guidance for EPA Staff, May 2008, Office of Public Affairs.)

Contracting Officers or any other authorized purchasers may, under certain circumstances, purchase specialty items for distribution to the public and/or EPA employees if the item conveys an environmental message consistent with an environmental statute and/or is imprinted with a Program Office's URL (or information telephone number). The purchase must be supported by the "necessary expense" rule. This is a rule of appropriations law which states that an expenditure not specifically provided for in an agency's appropriation is permissible only if it is reasonably necessary to carry out an authorized function of an agency, or will contribute materially to the effective accomplishment of an agency's function, and is not otherwise prohibited by law. The item must be relatively inexpensive and have insignificant utility.

These promotional communications products must deliver a cogent, useful message to a targeted audience in an appropriate forum. Their purchase and use must conform to Federal laws and rules for purchasing, printing, ethical standards and use of appropriate funds. The message must be honest in every sense, and the criterion for usefulness and value is how well it serves the public interest.

If you are considering creating, producing, purchasing and distributing a promotional product, please assure the environmental soundness of the product, addressing such qualities as recycling/recyclability, non-toxicity, sustainable production methods, as well as health and safety properties, with a baseline of, at least, no environmentally-negative aspects.

Promotional Giveaways with EPA Logos
EPA Printing Management Office apply the following guidelines: If the production method involves printing on paper, it must be submitted to the Government Printing Office (GPO).

For printing on material other than paper, you are encouraged to contact the Product Review Office at the earliest possible point of your planning for advice on how to proceed. For all other production methods (such as imprinting images and/or text on three-dimensional promotional items such as pens, coffee mugs, etc.), you are encouraged, but not required, to utilize GPO production services. You should compare the prices, product options, and delivery schedule available through GPO with other options including Lighthouse for the Blind, Blanket Purchasing Agreements that the Office of Acquisition Management has in place, etc.

If the production method is within the scope of the term printing, in all cases you are required to comply with GPO regulations. Failure to do so can be considered an unauthorized procurement. Employees will be held personally liable for all unauthorized procurements including those that do not comply with GPO regulations.

See Promotional Communications for EPA document (July, 2008) for approved promotional items and more information.

Employee Business Cards
Pursuant to the Javits-Wagner-O'Day Act, any official procurement for employee business cards must be acquired from the National Industries for the Blind (NIB) through the Lighthouse for the Blind, Inc., which is an authorized contractor on GSA's Federal Supply Schedule. Thus, all orders must be submitted through GSA. The procurement process can be done

at: http://shop.lighthousestore.org/.   Employees may only acquire 250 cards in any one transaction.

The business cards must have one-sided printing in either blue or black ink. The specifications for business cards require a minimum 100% recycled paper containing a minimum 50% post consumer fiber content, processed chlorine free, and printed with bio-based ink. In addition, the business cards must include a statement at the bottom declaring the card's recycled content specifications.

A low-volume user of business cards might, with supervisory approval, find it more economical and environmentally preferable to produce business cards on personal computers. The above specifications for format, paper, ink, and recycling statement must be followed.

Letterhead and Envelopes
CFR 41, Federal Property Management Regulations, specifies what weight, color, size and grade of paper and what color of ink are to be used for Government stationery. EPA Order 1015.2A, EPA Seal and Agency Identifier, requires the use of the EPA Seal on all official EPA stationery. Stationery may be printed for the following offices: Administrator, Deputy Administrator, General Counsel, Assistant Administrators, and Regional Offices. The Agency Printing Officer must approve any deviations from this list, including any revisions to existing stationery. No stationery bearing individual names is authorized. To assure that all EPA stationery is consistent nationwide and to meet EPA's requirement for the use of 100% postconsumer fiber content recycled paper, processed chlorine free, using vegetable-based inks, EPA-Headquarters established a contract for printing all stationery. This stationery includes the EPA Seal as a watermark and also a 100% recycled paper watermark, and as required on all EPA publications, includes the recycling paper statement printed at the bottom. Therefore, all requests for stationery must be processed by Headquarters.

Official envelopes must be printed through your local Printing Control Officer. All envelopes must contain the Agency identifier, return address, and the clause, "Official Business—Penalty for Private Use, $300." Unauthorized slogans or designs will not be used. All envelopes, except for Kraft envelopes, must also contain the printed on recycled paper logo and statement. Contractor use of the official EPA indicia on behalf of EPA must be approved by the Mail Management Branch, OARM, prior to entering mail into the USPS.

Official envelopes and labels used by contract mailers must bear the printed return address of the EPA organizational unit, not a private person, concern, organization or contractor. Any direct mailing done by a contractor is to be included as part of their cost within the contract or project.

Poster Presentations
(NOTE: This refers to poster presentations as are typically done at symposia and conferences. Poster, as used here, does not mean the promotional print type of poster.)

All presentations must give the impression of being the work of EPA rather than of any particular Laboratory, Office, or Center. For instance, ORD presenters should use the term "research and development at EPA" rather than the "Office of Research and Development" especially when speaking to audiences outside the Agency. The intention is to downplay organizational divisions that are meaningless to outside audiences.

A presentation format should, in most cases, include slides that: (1) introduce the identifying presenter, audience, and date; (2) a fact sheet with employee, budget and facility data; (3) a statement of EPA's commitment to sound science as the basis for decision-making; (4) a discussion of high-priority EPA research areas; (5) name and identification of the Laboratory/Office/Center presenting the program; and (6) a starting page for the presentation.

PowerPoint is the suggested software for creating poster presentations; thus the colors are RGB values. Common sizes of posters are 48" x 36", 30" x 40" or 40" x 30". If an event-specific format is provided, then that particular format should

be followed. Ideally, if a team of EPA staff is presenting at an event, it is beneficial for the team to choose the same format so that the suite of posters being presented by EPA has some unified look and feel. A further way to strengthen the impact is to have all of the posters in the same color or color suite. The same style sheets and grids will ensure consistent typographic standards and page layout. All posters should have consistent placement of the anchor elements: the EPA logo with signature; EPA publication number, if appropriate; date; and Internet site address. All posters are to be reviewed and approved by your respective Region/Laboratory/Office management prior to presentation. If copies of posters are to be printed and distributed outside the Agency, the GPO printing rules and regulations are applicable.

Audiovisuals.
(NOTE: This addresses a very broad range both of creative and technical formats. Also, see preceding section for CD packaging and duplication guidelines.)

As used here, audiovisual encompasses that range of media and formats that involve words and/or visual elements that are conveyed by electronic or mechanical (i.e not printed) formats. It includes slide shows and similar presentations, videos, broadcasting and motion pictures. Those formats have much in common, but, most of all, they require scripting.

An audiovisual script is not merely the spoken portion of the finished presentation; it is also a written description of the:
   •Visual presentation (ie: the pictures)
   •Non-verbal audio (such as sound effects or music)
   •Non-audio verbal (titles, credits, etc.)
   •Key editorial and directorial elements (such as scenes that require transition by dissolve or fade)

If candid or ad lib interviews are to be incorporated, such that the exact words of the interviewee will not be known until production is done, the script should convey fully the anticipated direction of the interview. If the production is in a format that entails interaction by a presenter or audience members, the script should convey any direction that is needed in that regard. Even for non-visual media (radio, podcast, etc) a script must convey many elements beyond merely the words that are to be spoken.

An audiovisual script develops like any communications product – concept, outline, rough draft, final. Actually, there are even more steps (see Glossary: scenario, treatment) to creating an audiovisual script than a typical text manuscript, but the key point is that production should not begin until the script has been carefully developed as a concept and is written and fully approved.

When contracting for script writing services with an outside vendor, it is the responsibility of EPA to provide the writer with a full written narrative of the concept, content and desired outcomes.

A well written, tightly edited script does not limit creativity; it possesses it; advances it. It is the chief source of creativity in a production. Good script writing greatly improves the efficiency and effectiveness of pre-production and production phases. In fact, one of the leading reasons to make the script as complete as possible is the cost-efficiency that it creates in production.

Scripting is addressed in this section – Production, as opposed to the Writing section – for two reasons: 1. As noted above, a script must have more than verbal communication to the audience. It must contain information about producing the show. A script is, in effect, written instructions for how to produce the show. 2. There is very little about the writing style of a script that does not conform to the general principles and ideas that are stated in the Writing section.

Pre-production essentially involves envisioning the finished program and thinking backwards through the steps that will be needed to create the product. If, for example, a set must built, props purchased, equipment rented, visual effects created (even simple ones like illustrations) the process for doing any of that must be anticipated. The script will identify many of

those elements, but – by the dozens – they must be prepared.

Each of them might, in turn, require more process steps. For example, if a set must be built, it must first be designed. Before being designed, it must be conceived. Those things might be purchased a la carte or written into a general production contract, but in any case must be known in advance.

Unlike publishing there is no standard set of technical steps to which every production must conform. Even within a specific genre of production, the elements that will be at the heart of any of its creative aspects – by the very nature of being creative – will be different from previous programs. Becoming familiar with basic technical, creative and production formats is the first, good step.

Creative and production formats that can be / have been used to present EPA material include:
- Educational / training (incorporating lecture, demonstration, text material, etc)
- Dramatized presentation (fictional story presentation, illustrating real-world situations)
- Educational documentary (the most often used format in EPA audiovisuals)
- News documentary
- Panel discussion / interview (ad lib / candid, scripted or elements of both)
- Animation
- Games (video games or Q&A contests, interactive or passive)

A public service announcement can employ any of the above, but has (among other elements) a very tight time stricture. Technical formats can involve multiple formats simultaneously, but in simple form include:
- Radio
- Television
- Film / tape / disc
- Satellite direct link (as well as broadcast transmission via satellite)
- Podcast
- Videocast
- Slide show (formats can overlap greatly here from Power Point to line art to photography)
- Computer-based (e.g. from interactive data bases to games)

Any or all of the above can be incorporated into exhibits and displays.

There is another element that is involved in audiovisual production that is so different from other media that it might fairly be called unique – distribution. The technical format that you use will greatly influence your effectiveness in reaching the audience. A couple of simple examples will make the point. Television is not a good medium to reach people with information that they need at work. Even the relatively small proportion of people who have televisions at their work-place do not watch intently much of the time. Computer-based formats will work for office-based audiences. Radio is often the most effective medium for rural audiences, if the right stations are targeted. It is practically a sign of our times that podcasting is an excellent format for younger audiences.

A final point. Most EPA audiovisual productions must conform to federal standards for accessibility under Section 508 of the Americans With Disabilities Act.

Podium Signage and Camera Backdrops
Podium signage, camera backdrops, and other such products that incorporate the EPA logo should use the standard design of the EPA logo. Sizes are determined by the event requirements. There are many considerations for production of these items, but one general rule should always be understood – the matter of scale and perspective is crucial. Something sketched on a plain piece of paper – then enlarged to stage size, possibly then reduced again to television screen

perspective – will almost always appear different than it did in the sketch.

Blocked by a speaker and podium. Too small to fill the stage. Too large to be read by normal eye-sweep of an audience or to fit the frame of a television screen. Dealing with those and other considerations require considerable expertise and thought.

Exhibits & Displays:

This category of communications products comprises a huge number of formats and materials from table-top placards to three-dimensional structures that can be the size of a small house. From a true communications perspective the core principles for creating exhibits are those of all other media: Know your audience. Have a structured message, preferably as part of a strategic communications plan. Create a product that is in an appropriate medium and format for that audience and message. The medium of an exhibit does, of course, have a unique characteristic: it is a physical place. It can be a park or transit stop but is most often a room in a building where people are gathered – a convention hall, classroom, store, gallery or visitor center, but that does not make it any more or less a communications product. It is too easy to think of it merely as a device to get attention, and that once it fulfills that function, the "real" communication is done in some other way. Yes, an exhibit does have an attractive function, but so do all communications. That does not diminish the need to create a "headline" (whether it might seen from 100 feet away or 5 feet away) that advances your campaign theme. Pictures and illustrations should tell a story, not just decorate an empty space. An exhibit is, in most cases, a type of multi-media format. That offers great creative opportunities, but it also demands more disciplined thinking than other formats do, because there are more variables to consider and to integrate.

Key production considerations include:
- The EPA seal or logo must be
    - Of a high resolution
    - Clearly visible from the distance from which we expect the display will be commonly viewed
    - At least as big as any partner logos also appearing on the display
- Consideration of the limitations and requirements of your display space (and potential future display spaces) when designing your display

Encouraged:
- Removable panels that can be updated as information changes. This greatly extends the life of many displays.
- Display heads that are a topic, not an office name. For example, instead of "Office of Solid Waste and Emergency Response", a good heading name might be "Cleaning Up America's Land."
- Text that is readable at a distance from which we expect the display will be commonly viewed. There are instances in which we might want to use smaller text to provide more detail, but not usually.
- Simple, brief text. Displays are commonly browsed, not read.
- Elements should involve visitors – physically…to talk with the staff at the display, view information and take other information products upon leaving.
- Before-and-after photos. These are popular and are a great way of illustrating progress.
- Unusual projects that incorporate innovative techniques. Such projects often make for interesting displays.
- Topic-relevant environmental tips. Incorporating useful tips gives people a reason to read your display. EPA displays a re often targeted towards audiences that have an interest in such things.
- Use of blue and green as the primary colors in your color scheme. These colors are commonly associated with EPA and are typically associated with clean air, land, and water.

Discouraged:
- Flow charts. They are bureaucratic and not commonly read or understood.
- Any text not readable from about five feet away. Very few people will walk right up to your display and read a full page of text.
- Office names as display titles. As explained above, topic-based titles are preferred.

•Displays that are only aesthetically pleasing, providing no information about any topic. Displays composed of only a title and a photo collage are not particularly informative and generally fail to attract attention.

Disapproved:
•Use of pictures that contain any of the following characteristics:
Copyright is not owned by EPA and permission to use the photo has not been granted, in writing, to EPA;
Any child under the age of 14 appears in the photo and permission to use the photo has not been granted – in writing – by the parent or guardian of each child appearing in the photo;
A child or children under the age of 14 appears in the photo and the child's geographic location is identified in any manner more specific than by state (e.g., it is permissible to have a photo with the caption "Children in a California school", but not "Children in a San Francisco school.").
•Removable display panels that do not match the look and feel of other panels in the display.
•Non-partner logos.
•Photos that are not clearly visible at the distance from which we expect the display will be commonly viewed.

Processes and Forms for Print Publishing

Product Review
When you send a public communications product to EPA Printing Management for production they will ask you to verify that it has been approved for production through EPA Product Review. Without that clearance they will (in most cases) refuse to print the piece. You can learn the any/all details about Product Review at: www.epa.gov/productreview/index.html.

The software system that tracks work through the Product Review process is called New PROTRAC. It will Yield a form which will validate your approval. It is helpful to include that form with your printing request.

Products that are subject to Product Review are public communications products, understanding that public means any audience outside EPA, including other federal agencies, but several types of publications are excluded. They include:
•Ordinary correspondence (e-mail or postal)
•All strictly legal or strictly legislative documents, including legal notices and notice of public hearings
•Internal EPA communications
•Peer reviewed papers, or papers for submittal to scholarly journals
•Proceedings (if they are verbatim transcripts, in part or whole) of a meeting or conference
•Official guidance documents offering EPA guidance on matters of public policy, regulatory interpretation
(NOTE: calling something guidance does not make it a guidance document)
•Technical documents (NOTE: technical document means: "A communication which requires a specific educational or professional background for the audience to understand substantially and substantively the meaning that is being conveyed." Neither the size or nature of the audience, nor the general nature of the subject matter relates to that definition. The operative element is the susceptibility of the communication to being understood by the intended audience.

Peer Review
Peer reviewed documents require substantial record keeping, to qualify them for publication.

This table outlines one good example from the leading EPA producer of such work, ORD.

Product Category	Description	Examples	Review	Record Keeping
Category 1 Major Scientific or Technical Work Products	Products that meet one or more of the Major Scientific or Technical Work Products Criteria	1. Dioxin reassessment 2. Air quality criteria documents	1. Internal EPA expert review (could include experts from ORD, program and/or regional offices) 2. External panel peer review (including meeting) 3. Review by AA/ORD 4. AA/ORD sign-off*	1. Copy of draft report submitted for external review 2. Charge to external reviewers 3. List of external reviewers 4. Written comments from external reviewers 5. Report of external panel 6. Response to external review 7. Final work product
Category 2 Important Scientific or Technical Work Products	Work products that are important to EPA decision making and do not fall into Category 1, e.g., work products that might not have an immediate impact on current or pending regulations or policy	1. Methods manuals 2. Chemical-specific assessments 3. Air quality and deposition models 4. IRIS documents	1. Internal EPA expert review (could include experts from ORD, program and/or regional offices) 2. External panel peer review (including meeting) 3. L/C/O director sign-off	1. Copy of draft report submitted for external review 2. Charge to external reviewers 3. List of external reviewers 4. Written comments from external reviewers (independent report if one is prepared) 5. Response to external review 6. Final work product
Category 3 General Scientific or Technical Work Products	Publication in recognized peer-reviewed journal or similar publications	1. Journal articles 2. Proceedings of symposia, conferences etc., that are peer reviewed 3. Book chapters	1. Peer review by journal 2. Division director sign-off	1. Final work product
Category 4 Other Scientific or Technical Work Products	Scientific or technical reports published with an EPA or ORD imprimatur that do not fall into Categories 1-2	1. Project reports 2. Technology transfer handbooks	1. Internal review by lab personnel 2. Division director sign-off	1. Draft submitted for internal review 2. Written comments from reviewers 3. Response to reviewers' comments 4. Final work product

EPA Publication Numbering System

When EPA was formed in 1974, a publications numbering system was developed to track and disseminate technical documents, which fulfilled the requirements of CFR Title 44 for Departmental distribution of Government publications. In 1992, this publications numbering system was expanded and became an Agency-wide numbering system and included both scientific and public-oriented publications. The system was designed to be applicable to all products (publications, disks, films, etc.) that are intended for distribution outside the Agency. As of 1992, every product produced by the Agency is to be assigned a publication number. The EPA publications numbering system is maintained by OARM's National Service Center for Environmental Publications (NSCEP), which is located in Cincinnati, OH. The Internet site address is http://www.epa.gov/nscep/, and the Internet site for obtaining an EPA publication number is http://cincinnati.epa.gov/services/nscep/nscep_form.asp.

Structure of the Publication Number

The publication number consists of an alphanumeric designator identifying: the AA/RAship, Office within the AA/RAship, publication type, year of publication, sequence number and, as necessary, an indicator of volume number for publications

bearing identical titles.

A sample number looks like this: EPA/201/N-08/123b

The "EPA" is required for clear identification on multi-agency publications, computer disks, and other items where ownership might not be obvious. For consistency, it should be used on all products. The prefix does not, however, appear in the NSCEP database.

The number itself has six elements, labeled 'a' through 'f' for explanation purposes.

A	b	c	d	E	f
20	1	N	08	123	B

a. "20" - The first two digits signify the organization responsible for producing the publication. The proper code for the organization is selected from the "Office Identification Codes" listed below. Note that the larger and more complex Offices have from three to six possible identification codes.

b. "1" - This single digit is assigned to a specific Office within the organization at the discretion of that Office's management, in coordination with NSCEP. In the above example '201' number, the 20 signifies the AA for Administration and Resources Management and the 1 might indicate the Office of Administration.

c. "N" - A single letter identifies the type of information product. These codes are assigned using the "Priority Order" also listed below. For example, a compilation of Federal Register notices stored on a computer disk would be given type code 'C' because the "computer" entry is listed before the "Federal Register" entry in the Priority Order. The main purpose of these codes is to give librarians and inquirers an idea of what they are looking for before effort is expended on the search. Everyone seeking computer disks only could do a search on the code 'C'. The codes have numerous other uses, such as allowing a computer to exclude draft and unpublished documents when searching a list of publications on a certain topic. In the above example, 'N' signifies a periodical.

d. "08" - The calendar year of publication.

e. "123" - A three-digit number (001 through 999) will be assigned by NSCEP. The number starts with 001 on each January 1st and increases by one for each new publication. Contact NSCEP at http://cincinnati.epa.gov/services/nscep/nscep_form.asp to obtain this number or contact your Office/Laboratory Technical Information Manager.

f. "b" - An expander to the publication number is assigned to indicate multiple volumes only. (Volume indicators are not used for single volumes. Therefore, if there is a 'b' there must be an 'a'.) This is a lower case letter with one exception: a capital F can be used to indicate a Final public-comment draft.

Office Identification Codes
10: Administrator, Deputy Administrator
11: Administrative Law Judges
12: Science Advisory Board
13: Cooperative Environmental Management
14: Congressional and Legislative Affairs
15: Civil Rights
16: International Activities
17: Communications, Education and Public Affairs
18: Small and Disadvantaged Business Utilization

20-22: Administration and Resources Management
23: Policy, Planning and Evaluation
27: Regional Operations and State/Local Relations
30-34: Enforcement and Compliance Assurance
35: Office of Inspector General
36: Office of General Counsel
40-45: Air and Radiation
50-55: Solid Waste and Emergency Response
60-65: Research and Development
70-75: Prevention, Pesticides and Toxic Substances
80-85: Water
901: Region 1
902: Region 2
903: Region 3
904: Region 4
905: Region 5
906: Region 6
907: Region 7
908: Region 8
909: Region 9
910: Region 10
930: Central Regional laboratory, MD

Type Codes in Alphabetical Order
A: Article reprinted from other publication, abstracts, book chapters, presentations
B: Reference (Glossary, Bibliography, Symposium Papers, Training Guides, Telephone Dir., etc.)
C: Computer (CD-I, CD-ROM, Floppy Diskette, etc.)
D: Draft
E: Exhibit, Display, Booth
F: Unbound Publication (Fact Sheet, Leaflet, Bulletin, Flyer, Brochure, etc.)
H: Photograph, Filmstrip, Slide, Poster, etc.
J: Peer-reviewed Journal
K: Bound Publication (Booklet, Pamphlet, Speech)
M: Microfilm, Microfiche
N: Periodical (other than peer-reviewed journal), Journal, Newsletters
P: Public Comment Draft
Q: Unpublished
R: Report, Symposium Report, Proceedings
S: Summary, Research Brief, Conference Summary, Issue Paper
U: Audio
V: Video
X: Internal
Z: Federal Register

Type Codes in Priority Order
Assign codes in the following sequence:
E: Exhibit, Display, Booth
C: Computer (CD-I, CD-ROM, Floppy Diskette, etc.)
V: Video

U: Audio
M: Microfilm, Microfiche
H: Photograph, Filmstrip, Slide, Poster, etc.
A: Article reprinted from other publication, abstracts, book chapters, presentations
Q: Unpublished
Z: Federal Register
J: Peer-reviewed Journal
N: Periodical (other than peer-reviewed journal), Journal, Newsletters
X: Internal
B: Reference (Glossary, Bibliography, Symposium Papers, Training Guides, Telephone Dir., etc.)
D: Draft
P: Public Comment Draft
S: Summary, Research Brief, Conference Summary, Issue Paper
R: Report, Symposium Report, Proceedings
F: Unbound Publication (Fact Sheet, Leaflet, Bulletin, Flyer, Brochure, etc.)
K: Bound Publication (Booklet, Pamphlet, Speech)

Cataloging

EPA needs to maintain an up-to-date inventory of information products for three reasons: 1. A catalog of publications, videos, CDs, etc., is an essential tool in fulfilling EPA's obligation to provide information to the public. 2. The Office of Management and Budget requires all federal departments to maintain an electronic inventory of publications. 3. Publication coordinators, communications planners, printing officers, and others need accurate data to make sound managerial decisions.

EPA's National Service Center for Environmental Publications (NSCEP) maintains a Web site to access EPA's publications, which currently has more than 7,000 in-stock and 27,000 digital titles. EPA's printed publications (hard copies) are available through NSCEP, and EPA's digital publications are stored in the National Environmental Publications Internet Site (NEPIS) database, were publications can be searched, retrieved, downloaded printed and/or ordered. NSCEP also has the responsibility for archiving all of EPA's publications and assuring their availability in all EPA Libraries.

Technical Guidelines for Print Publishing

There are numerous technical guidelines for print publishing. They cover the topics immediately below.

Camera Copy

If a document will be printed in one ink color, it may be printed from camera copy or electronic files, as described below. Camera copy should be submitted (one copy) if a product will be printed in one ink color. It should be submitted on 8 ½ x 11" white paper with text and graphics printed out in laser printer quality with black ink. Tables and graphics (figures) should be one color with crisp lines and text. Page numbers are generally located at the bottom of each page that has an image or text on it.

Electronic Files

If a document will be printed in two or more ink colors, it must be printed from electronic files.
Two types of electronic files are appropriate if printing will involve two or more ink colors: 1) Electronic Design & Prepress Files and 2) High-Resolution Portable Document Format (PDF) files. Files created in Office Graphics software (e.g., Microsoft Word, PowerPoint, WordPerfect, Harvard Graphics) and PDF files created specifically for web use should not be used for print publishing due to resolution, color, and other issues.

Electronic Design & Prepress (EDPP) Files:
The native application programs listed below are used to create a majority of the print publishing work received by the Government Printing Office. They are also the preferred programs of the commercial printing industry because they support design and prepress functions. Files created using these programs output with fewer problems than files created in programs not designed for print publishing. Other programs may be used, but unless they support prepress functions (e.g., PANTONE colors, trapping, bleeds, crop marks, all type fonts and color separation), problems will likely occur. Customers who use programs other than those listed should consider supplying high-resolution PDF files instead.

Documents are printed from native application files (files used to create the document). Along with the native files, all supporting information must be furnished on disk/CD ROM to the printer. For example, if a figure created in Adobe Illustrator has been placed in a PageMaker document, the electronic Illustrator file and all related information must be included on the disk. If properly placed, these images are linked to the PageMaker document and will print smoothly. If a problem arises, the files can be accessed by the printer and printing will not be interrupted.

EDPP files should be created from the following preferred Windows platform native applications:
   • Page Layout: QuarkXPress, Adobe PageMaker, Adobe FrameMaker, Adobe InDesign, Corel Ventura, Microsoft Publisher 2000*
   • Drawing/Illustration: Corel Draw, Macromedia FreeHand, Adobe Illustrator
   • Image Manipulation: Adobe Photoshop, Corel PhotoPaint

High-Resolution PDF Files:
High-resolution Portable Document Format (PDF) files can take the place of EDPP files for printing. These files are designed as self-contained, platform-independent files and, if created properly, could eliminate many common prepress problems. PDF files should contain embedded fonts, graphics, color, data, and layout structure. PDF files for press output must be created using the appropriate settings in Acrobat Distiller, not through the PDFWriter. PDF files created using the PDFWriter are not acceptable for print publishing. See the web site at http://www.gpo.gov/procurement/ditsg for more information on creating press-ready PDF files.

How To Submit a Document for Printing After Peer Review and Office/Laboratory Clearance Approvals
Authorized organizations for printing EPA Publications (EPA Printing Management Circular 94-1) include the following:

In-house
OARM, Facilities Management and Services Division, Mail Management Branch/Document Production Team, Washington, DC: All EPA single-color printing jobs of fewer than 60,000 impressions (single or multi-page sheets printed in one cycle).

GPO (Government Printing Office)
OARM, Facilities Management and Services Division, Printing Control Officers, Regions and outlying EPA facilities: all print jobs, including multi-color publications, and all CD-ROM and computer floppy diskette production.

Although contractors might develop EPA publications, they may not provide any printing services under the contract. Duplicating services are allowed (up to specified quantities for draft and incidental copy needs under the contract), not for publishing final products for public distribution. Contractor-produced publications are subject to the product development and approval process starting at the concept stage.

Document Preparation for Printing
   • Any software application can be used to develop documents to be printed in one color from camera copy.
   • Documents to be printed in two or more colors should be created using desktop publishing software.
   • If a document to be printed from electronic files is created in a software program other than desktop publishing software, the resulting end product could be of a lesser quality.

Requesting a Cost Estimate from your local Printing Control Officer:
Printed product: Provide the number of pages in the document and quantity required, camera copy or electronic files, and any special requirements, such as color processing, shrink wrap, three-hole punch, rush delivery, etc.
CD ROM duplication: Provide the quantity required, disk label and jewel box printing requirements, size of files to be copied, shrink wrap, etc.

Required forms for printing from camera copy:
- EPA Form 2200-9, Printing, Distribution, and Inventory (available on Web Forms)
- GPO Form 3868, Notification of Intent to Publish (available at http://www.gpo.gov/forms/index.html)
- Camera copy (laser printer quality, black ink on white paper).

Required forms for printing from electronic files:
- EPA Form 2200-9, Printing, Distribution, and Inventory (available on Web Forms)
- GPO Form 3868, Notification of Intent to Publish (available at http://www.gpo.gov/forms/index.html)
- GPO Form 952, Desktop Publishing Disk Information (available at http://www.gpo.gov/forms/index.html)
- CD containing electronic printing files
- Two laser visual/output copies of the entire document printed from files that will be used for printing
- If more than two colors of ink are used, include e-mail approval from the Agency Printing Officer.

Journal Article Publishing and Printing
As stated in EPA's Printing Manual, 7/25/94, "The Comptroller General has held that the purchase of reprints of articles that were prepared by Government employees as a part of their official duties, but were published in non-governmental publications, is the same as procurement of Government printing. Reprints of such articles must, therefore, be procured under requirements established by the Joint Committee on Printing (JCP) in the Printing and Binding Regulations, i.e., all printing must be procured through GPO. The JCP granted EPA a waiver of the Government Printing and Binding Regulations. The waiver grants EPA permission to pay page charges and to purchase separate copies of the articles directly from the private publisher at the time of their publication." This waiver was granted with the condition that an annual report be submitted to JCP which lists all pertinent publishing and cost information. This report is prepared by the Printing Control Officer in each EPA location. Thus, the Printing Control Officer must approve and keep documentation on each request for journal article page charges and reprints.

Page Charges (NOTE: Scientific and technical associations customarily charge the author a fee for each page that is published in their journals.)

Scientific and technical associations customarily charge the author a fee for each page that is published in their journals. These page charges generally range anywhere from $18/page to $75/page for black and white printing, and as high as $950/page for color printing. Quite often, 50 free reprints are offered to the author by the journal. As stated in EPA's Printing Manual, "Official writing published in a private journal is in the public domain and thus not protected by the journal's copyright." Therefore, the author cannot approve the transfer of copyright to the journal association.

The forms needed for authorizing black and white page charge obligations are:
1. EPA Form 1900-8, Procurement Request/Order, or a similar form if using bankcard, and
2. Journal's order form that gives the article title, number of pages in the article, volume no./manuscript no., etc.

These two documents, with signatures and accounting information, are to be submitted to the Printing Management Office for processing and approval.

Articles that are printed in more than two colors of ink require special approval, just like any other printed materials. Approval for these page charges must be obtained from the Agency Printing Officer. You can e-mail your request to

him, providing an appropriate justification, i.e., color is needed for clarity of the scientific data being presented, object identification, etc. His written approval must be included with your procurement request.

The forms needed for authorizing color page charge obligations are:
1. EPA Form 1900-8, Procurement Request/Order, or a similar form for bankcard,
2. Journal's order form that gives the article title, number of pages in the article, volume no./manuscript no., etc., and,
3. Written color approval from the Agency Printing Officer.

These three documents, with signatures and accounting information, are to be submitted to the Printing Management Office for processing.

Reprints
At the present time, the Office of General Counsel (OGC) is making a determination regarding the legality of EPA reprinting journal articles directly from the published article. Controversy exists because when we reprint it from the published article, EPA would be printing the Journal's format, type-setting, publishing name, etc., and this could be a possible infringement on their copyrights. Until we receive further guidance from OGC, the policy outlined below is being used by all EPA offices. The OGC stated that EPA can, however, print the edited version of the manuscript (not the article) with our own format, adding a specific citation such as "Published in the . . . Journal" or "As submitted to the . . . Journal" or "Accepted by the . . . Journal" or "As appeared in the . . . Journal."

Printing Through GPO (Black/White Only)
EPA can print the article through GPO, exactly as it appears in the published journal, only with a copyright release from the Journal. The forms needed are:
1. Camera copy (Xerox of article taken from the Journal),
2. Printing, Distribution, and Inventory, EPA Form 2200-9, and
3. Xerox copy of the copyright release received from the Journal association.

The turnaround schedule for receipt of the printed article is usually about 3-4 weeks.

Purchasing Directly from the Journal (Black/White Only)
EPA can (normally) only purchase the reprints directly from the Journal if the reprints can be printed on recycled, uncoated paper. The originator must contact the publisher and verify the use of this paper. A statement verifying this must be included on the Procurement Request/bankcard form. EPA's Agency Printing Officer has issued a policy that coated/ litho-coated paper is unacceptable for EPA's use because it is not recyclable.

If the Journal's publisher uses coated paper only, you have two choices: (1) print the article through GPO after obtaining a copyright release from the Journal, or (2) purchase the reprints from the Journal after obtaining written approval from your Printing Control Officer (PCO) for use of litho-coated paper.

To purchase reprints directly from the Journal, the following items are needed:
1. EPA Form 1900-8, Procurement Request/Order, or a similar bankcard form (include recycled paper statement),
2. Journal's order form that gives the article title, number of pages in the article, volume no./manuscript no., charges for reprints, etc.
3. Written approval from your PCO for use of litho-coated paper, if applicable.

Purchasing Directly from the Journal (Containing More Than Two Colors of Ink)
If the article is to be printed in more than two colors of ink, written approval from the Agency Printing Officer must be obtained before any reprints can be purchased/printed, either from the Journal or through GPO. Generally, an article that is printed in two or more colors cannot advantageously be reprinted through GPO nor can the document be reprinted in black

and white as opposed to color printing. Therefore, all such reprints need to be purchased through the Journal. If litho-coated paper is the only paper the Journal uses then this too needs to be approved by your PCO.

To purchase reprints containing more than two colors of ink, the following items are needed for purchase from the Journal:
1. EPA Form 1900-8, Procurement Request/Order, or a similar bankcard form (include recycled paper statement, if applicable),
2. Journal's order form that gives the article title, number of pages in the article, volume no./manuscript no., charges for color reprints, etc.
3. Written approval from the Agency Printing Officer for purchasing color reprints, and
4. Written approval from your PCO for use of litho-coated paper, if applicable.

Key Printing Questions

Whom do I call to get a price estimate?
For Washington, DC, contact the Agency printing officer. For the regions and outlying laboratories, contact your respective printing control officer.

What colors of paper are available, and what colors of ink can I use?
The Joint Committee on Printing has designated several paper weights and colors for federal government printing. However, EPA requires that paper stock for all EPA printing and copying must contain a minimum of 50 % post-consumer fiber content, processed chlorine-free, using vegetable-based ink (see paper standards for publishing and duplicating). Since it is expensive and time consuming to obtain recycled colored paper, EPA prints the majority of its documents on white paper using colored ink. The Pantone Matching System is used for reproducing ink colors. Over 1,000 ink colors are available. The ink color guide also is available from your local Printing Management Office. When using more than three colors of ink on a page, four-color process must be used.

Do I need any special approval to use more than one color of ink?
Your local Printing Control Officer has the authority to approve the use of two colors of ink. If more than two colors of ink are required for printing, a justification e-mail, approved by EPA's Printing Officer, must accompany the print package. Requests for approval should be e-mailed, with accompanying PDF file, to the Agency Printing Officer well in advance of submitting your package for printing.

Can I design my own graphic logo for a particular area of research?
Program and office identifiers, or brands, other than the Agency seal or logo with signature, are discouraged and require approval by the Office of Public Affairs (OPA) before adoption. Approved brands must not be so large as to compete with the Agency's identification system or "corporate identity." If another agency, research group, think-tank, university, partnership or company wants to reproduce the EPA logo for purposes acceptable to the Agency, permission must be granted by OPA, which will provide a copy of the logo.

When does a "copy center" job become a "printing" job?
The Joint Committee on Printing has determined that if a job requires more than 5,000 impressions of any one page or 25,000 impressions of aggregate pages, it is considered to be an item of "printing" and must be obtained through the Government Printing Office, i.e., a document of 120 pages must be "printed" if more than 208 copies are needed (120 x 208 = 24,960 impressions). A contractor can never be a prime source for printing reports.

I only need a small number of copies of a two-page flyer that has colored illustrations, and I need the copies within a few days. Can I go to Kinko's, for example, and have it copied?
All printing must go through the Government Printing Office. However, printing can be procured with the bank card for

emergency (sole source) photocopy/print jobs not to exceed $1,000 if a waiver is approved in writing (memorandum or e-mail) by the EPA Printing Officer or a local Printing Control Officer (see waiver procedures for emergency photocopying/printing services, Printing Management Circular, 03-03, August 2003). Color copiers, available in many EPA Copy Centers, can be used for a limited number of copies.

How can I pay for journal article page charges and reprints? Can I use a bankcard?
Page charges and reprints can be purchased with a bankcard after obtaining approval (by submitting a Procurement Request form) from an EPA Printing Control Officer. The journal must print the reprints on uncoated, recycled paper. If litho-coated (shiny) paper is the only paper used by the journal, than a waiver must be obtained from the local Printing Control Officer.

I want to prepare and send my four-color print job to print from a CD. What software is suggested?
Two types of electronic files are appropriate if printing will involve two or more ink colors: (1) files created in Electronic Design and Prepress (EDPP) applications, and (2) high-resolution PDF files. Examples of industry standard EDPP applications include Adobe InDesign, Illustrator, Photoshop, etc. Files created in word processing software (e.g., Microsoft Word, PowerPoint, WordPerfect, etc.) and PDF files created specifically for web use should not be used for print publishing due to low resolution, no support of color separation and definition and other issues (see How to Submit a Document for Printing).

How do I know when to request "proofs" of a job before it is printed?
Whenever a job is printed from electronic files, a pre-production proof is always suggested. Even though the desktop printer in your office outputs a copy exactly the way you want it to be printed, an image-setter, used by the printing contractor to produce printing, could produce an output that varies considerably. Usually, a blueline/digital proof is requested for black and white print outputs, and a color-match proof is requested for color outputs.

Top 10 Things You Can Do to Create Better Printed Documents

1. **Decide which type of document you're creating:**
   - Administrative or office documents that will be photocopied
   - Publications, brochures, and other materials that will be printed
2. **Use a professional page layout program and software for projects that will be printed by commercial print contractors.**
Examples are:
   - Adobe InDesign
   - Adobe Photoshop
   - Adobe Illustrator
3. **Use only printing inks in your document and its graphics, not RGB.**
   - Pantone Matching System spot colors.
   - CMYK 4-color process ink colors (cyan, magenta, yellow, and black)
   - Grayscale (black and white)
4. **For vector graphics (such as pie charts, logos and clip art), use the .EPS file format (encapsulated PostScript).**
5. **Create vector graphics with a professional PostScript-compatible drawing program.**
   - Adobe Illustrator
   - Macromedia Freehand
   - **CorelDraw**
6. **Photographs and other bitmapped graphics should use the .TIF file format and be set for 300 DPI resolution, or 2 x the line screen (lpi) of the output device.**
7. **Use either PostScript or TrueType fonts in the document, but not both.**
Remember the PostScript fonts are the printing industry's most widely accepted format.

8. Print your laser visuals on a PostScript printer that has the latest PostScript printer driver correctly installed on your workstation.

9. Print "color splits" from your desktop printer that simulate color film separations and check for these problems:
- Duplicate PMS spot ink colors
- Too many colors, or more colors than you planned for
- Problems with bleeds, knockouts and overprints
- RGB graphics that don't separate at all

10. Send all of the following to your local EPA Printing Office:
- Files from the desktop publishing page layout program
- Graphics and photo files
- Fonts (.PFM & PFB for Windows PostScript, suitcase & printer file for MAC PostScript)
- B/W composite printout from your laser printer
- Color splits from your laser printer
- Color composite printout from your color printer
- Folding dummy for brochure and other items
- Written instructions for the print contractor
- GPO Disk Information Form 952

Authorities and Legal Information Guide

Authorities and Legal Information Section: Table of Contents

Authorities and Legal Information

Production

This chapter provides information that is generally applicable to all public communications documents, whether they are printed or only posted on the web. It identifies important reference documents, including government laws and EPA orders, manuals, policies and procedures, and provides information regarding copyright, notices/disclaimers, and web applications. Originators should note the information below relating to children's privacy. More detailed information and children's copyright policy and Web application regarding children can be found at: http://intranet.epa.gov/oei/imitpolicy/transmittals.htm.

NOTE: This manual – The EPA Communications Product Standards Stylebook – is, itself, grounded in various authorities of federal statute, EPA Administrative Orders and federal regulations. They are cited fully in Appendix B. Bibliography (below) and are referenced throughout this manual.

Authority and Sources of Information

The legislative, regulatory and other formal policy issuances governing EPA communication products and procedures described in this Stylebook are taken from a compilation of sources. For your reference, these numerous sources are listed in Appendix A. The Headquarters' Office of Public Affairs has the authority to revise and update the guidance contained in this Stylebook.

Copyright/Trademark Laws

EPA's Office of General Counsel wrote these guidelines because EPA employees often are uncertain about what to do with documents that come to them with copyright notices. However, guidelines are not a substitute for professional legal advice. Because copyright law is complex and situation-based, consult EPA's legal counsel for answers to specific questions.

The use of the symbols "TM" or "SM" to indicate a trademark or service mark in an EPA publication is optional.   For EPA marks that are registered with the patent and trademark office, the owner can and should display the circled 'R' next to the mark. Energy Star, SmartWay and WaterSense all are registered, and all can display the circled 'R.' Similarly, the owner of the copyright in a work can, but doesn't have to, display the circled 'C' on the work (or the word "copyright" or other designations to indicate a copyright). In each of these cases, the display of the symbol doesn't effect whether a trademark or a copyright exists. It does effect whether the owner must show actual knowledge or can obtain certain damages in an infringement action. We don't need to display a trademark or copyright symbol when we mention a trade name in our publications.

The Nature of Copyright

Copyright protection is available to the authors of "original works of authorship" including literary, dramatic and musical works as well as computer software. Copyright protection for most works subsists from the time a work is expressed in a fixed and tangible form, even if the work does not carry a copyright notice. The author of a copyrighted work (or the author's assignee) has the exclusive right to reproduce, distribute, perform or display the copyrighted work, or to prepare derivative works based on the copyrighted work. An author's copyright protects the author's expression, but it does not extend to facts or ideas contained in that expression. The duration of copyright protection has changed in recent years, but as a rule of thumb, one should assume a work is copyrighted if it was first published less than 75 years ago.

Government Works

Section 105 of the Copyright Act (17 U.S.C. §105) reads as follows:
Copyright protection under this title is not available for any work of the United States Government, but the United States Government is not precluded from receiving and holding copyrights transferred to it by assignment, bequest, or otherwise.

Section 101 of the Copyright Act defines a work of the United States Government as follows:
A "work of the United States Government" is a work prepared by an officer or employee of the Unites States Government as part of that person's official duties. There can be no U.S. copyright in any work prepared by an EPA employee as part of that employee's official duties. For example, if a work is the result of either a specific assignment or is of a nature as to be so closely related to that employee's duties as to be an expected consequence of such duties, there cannot be a U.S. copyright in that work. Accordingly, the Copyright Act cannot be used to restrain dissemination of a work of the United States Government in the United States, by either the work's author or the government.

Works of Recipients of Assistance Agreements and Contractors

Works by recipients of EPA assistance agreements and EPA contractors are not considered "works of the United States Government" under the Copyright Act. Under most circumstances, assistance agreement recipients and contractors are allowed to establish copyright in works produced under their agreements with the government.

Copyright in works arising from EPA assistance agreements (grants or cooperative agreements) with institutions of higher education, hospitals and other nonprofit organizations is governed by Title 40 Code of Federal Regulations (CFR), §30.36. Copyright in works arising under grants to state, local and Indian tribal governments is governed by 40 CFR §31.34. The copyright provisions governing EPA assistance agreements allow a recipient of a grant or cooperative agreement to copyright a work without approval from EPA.

Copyright in works arising under EPA contracts is governed by Subpart 27.4 of the Federal Acquisition Regulations (FAR) (48 CFR §§27.400-27.409). FAR Data Rights Clause No. 52.227-14, Rights in Data—General (48 CFR §52.227-14), is found in most EPA research and development contracts. FAR Clause 52.227-14 provides that the contractor may establish copyright in scientific and technical articles without approval from EPA. However, the FAR clause does require the approval of the Contracting Officer before a contractor may establish copyright in all other data first produced under a contract. In most cases, retention of copyright protection by the contractor is in EPA's best interest in that the copyright provides an incentive for the production, publication and utilization of the work.

In lieu of the above data rights clause, certain contracts for the production or compilation of data may contain the FAR Clause No. 52.227-17, Rights in Data—Special Works (48 CFR §52,227-17). Under the FAR's Special Works clause, the contractor agrees not to assert copyright to the work first produced in the performance of the contract without prior written permission of the Contracting Officer. If permission is not granted, the government can obtain copyright by requiring the contractor to formally register for copyright protection and assign the copyright to the government or a designated assignee. Thus, this clause provides a means for the government to obtain copyright in, among other things, compilations of data, including computer software, that is developed under an EPA contract.

Works of individual authors originated while employed by a recipient of an EPA assistance agreement or an EPA contractor are the property of the author's employer. Under Section 201 of the Copyright Act (17 U.S.C. §201), an employee's works are considered "works for hire" and, as such, are considered the property of the employer. The rights of such employers in their employee's copyrighted work are determined by the applicable assistance agreement or contract regulations discussed above.

The regulations governing contracts provide that when a contractor is permitted to assert copyright in material generated under the contract, the government is vested with a royalty-free, nonexclusive, and irrevocable license throughout the world to reproduce, distribute (except for computer software), perform or display publicly the work, and prepare derivative works from the work by or on behalf of the government. Similarly, although not identically, the regulations governing assistance agreements provide that when a recipient asserts copyright in material generated under an assistance agreement, the government reserves a royalty-free, nonexclusive, and irrevocable right to reproduce, publish or otherwise use the work for federal purposes, and to authorize others to do.

Updating and revising official government reports or copyrighted compilations of data received under EPA assistance agreements and contracts is sanctioned within the terms of the government's copyright license. Such a revision to an EPA-sponsored report would not alter the copyright held by the EPA assistance agreement recipient or contractor, nor would it change the status of EPA's copyright license in such material.

EPA is also entitled, pursuant to its copyright license, to modify copyrighted materials prepared by EPA contractors. For example, if an EPA Project Officer, in using a copyrighted report, initiates changes that result in a revised final report, such action is consistent with the terms of EPA's copyright license.

Joint Works of EPA and Non-EPA Employees

When an EPA employee, as a part of his or her official duties, participates as a coauthor of a work, the portions of the work coauthored by the EPA employee are potentially excluded from copyright protection under Section 105 of the Copyright Act (17 U.S.C. §105). Portions of the coauthored work that can be separated from the work of government employees remain copyrightable. When it is anticipated that an EPA employee will participate as a coauthor of a work arising under a contract or assistance agreement, it is advisable to give the outside coauthor notice of copyright restrictions that might apply.

Use of Copyrighted Materials

Copyrighted material may not be copied or displayed by EPA, or incorporated in EPA documents unless written permission of the copyright owner has been obtained. Prior use of copyrighted material in another government publication does not constitute permission for EPA to use the same material. Also, bear in mind that the absence of a copyright notice or the unpublished status of a work does not establish that the work has not been copyrighted. When permission to use copyrighted material has been obtained and the material is used in an EPA document, the copyrighted material should be identified by the following statement:

Reprinted from (title of publication, year of first publication) by (name of author) with permission of (name of copyright owner).

The National Technical Information Service (NTIS) requires that copyright release letters accompany publications submitted to it for distribution. The following is an example of a letter giving EPA and NTIS permission to use copyrighted material:

Dear :
Permission is given to the U.S. Environmental Protection Agency (EPA) and to the National Technical Information Service (NTIS) to reproduce and sell the document identified below containing the following copyrighted material: (Describe the material; include the title, page number, number of the table(s) or figure(s), and any other identifying information.) The

following copyright acknowledgment will be included:
"Reprinted from (title of publication, year of first publication) by (name of author) with permission of (name of copyright owner)."
EPA Document: [Identification of the EPA Document]
The EPA author should, within reason, follow any special acknowledgment wording requested by the copyright owner.
The data rights provisions applicable to both assistance agreements and contracts limit the right of the recipient or contractor to incorporate copyrighted materials in the product delivered to EPA. Prior to inclusion of copyrighted material in work product delivered under an EPA assistance agreement or contract, the recipient or contractor must first obtain the copyright owner's written permission for the government's use of such material. The recipient or contractor is responsible for all necessary paperwork and any fees related to obtaining permission to use copyrighted materials.

Fair Use Doctrine

The narrowly-construed doctrine of "fair use" limits a copyright owner's absolute ownership rights. The contours of the "fair use" doctrine are vague. Section 107 of the Copyright Act (17 U.S.C. §107) instructs that "fair use of a copyrighted work…for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright." Although the Copyright Act does not attempt to define "fair use," the statute includes four factors to be considered by courts making "fair use" determinations. The four factors are as follows:

1. The purpose and character of the use, including whether the use is of a commercial nature or is for nonprofit educational purposes, and whether the use is transformative;
2. The nature of the copyrighted work;
3. The amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
4. The effect of the use upon the potential market for or value of the copyrighted work.

Under the first factor, courts focus on two primary issues. First, they consider whether the use is a transformative use that adds something to the work (e.g., literary criticism or scholarship) or whether the use is merely a copy offered as a substitute for the original. Second, the courts consider whether the use is for commercial or nonprofit purposes. A nonprofit use for socially beneficial purposes, while not determinative, weighs in favor of a fair use finding.

Under the second factor, courts find the scope of "fair use" is greater with respect to factual works than non-factual works. Under this factor, courts have also found that the scope of fair use is much narrower for high-priced newsletters than for inexpensive mass circulation periodicals such as newspapers.

Under the third factor, courts disfavor the copying of entire articles or publications. Courts consider not only the percentage of the original used but also the importance of the portion used. Use of a portion that is the "heart of a work" is less likely to be considered a "fair use."

Under the fourth factor, courts are less likely to find "fair use" if widespread practice of the challenged use would adversely affect the market for the copyrighted work.

In making "fair use" determinations, courts are not restricted to the four factors discussed above. In addition, the amount of weight courts assign to each factor varies with the specific circumstances. Accordingly, "fair use" inquiries are highly fact-specific and do not readily admit to bright line generalizations. For further guidance on questions of "fair use," contact EPA's Office of General Counsel.

Computer Software and Data

Commercial computer software is almost always copyrighted. In addition, computer software is generally sold under software license agreements that provide additional limitations on use of the software. As with other categories of copyrighted materials, permission of the software's copyright owner must be obtained before the software may be copied or otherwise incorporated into an EPA work product. Permission for limited use and copying of computer software may sometimes be found in the software license agreement under which the government purchased the software.

Computer networks and computer bulletin boards facilitate the display and copying of copyrighted materials. Display of a copyrighted work on a computer network or bulletin board infringes the owner's copyright no less than would mass distribution of hard copies of the same work. In addition, display of copyrighted materials on widely accessible computer networks and bulletin boards could subject the government to unforeseen copyright infringement liability. Thus, copyrighted materials should not be displayed on computer networks or bulletin boards unless the copyright owner has given EPA written permission for such display.

Children's Privacy

Photos taken of children (under the age of 18) in public spaces (e.g., EPA outreach events, EPA facilities, EPA Earth Day activities) will not be disseminated if they contain or are combined with other information that may identify a child or children (name, location, or other personal information). This does not apply to clip art or other widely-used graphics of unidentified children. The use of photos, taken in a protected environment such as a school or hospital, and showing a highly-defined and recognizable image of a child or children that identifies their name, location, or personal information, requires a release; the release must be signed by a parent or guardian. In disseminating photos of children, consider first whether it might create a new vulnerability of unwanted attention for the child(ren).

Additional Information

For additional information regarding the law on copyright matters, you should contact the Office of General Counsel, Finance and Operations Law Office, at (202) 564-5323.

Notices/Disclaimers
Any notice/disclaimer is to be printed on the front matter of your document.

Draft Products
•Preliminary Draft
All draft documents require disclaimers, which should state that the document is in draft, should not be quoted or cited, and has not been subject to required EPA policy and/or technical review. The disclaimer should indicate when the report is planned for official release. The top of each page should be labeled "draft document - do not cite or quote." EPA documents in the draft stage should not be cited as references. The following statement should be included:
•Preliminary Draft Notice
This document is a preliminary draft. It has not been formally released by the U.S. Environmental Protection Agency (EPA) and should not at this stage be construed to represent Agency policy. It is being circulated for comments on its technical merit and policy implications.
•Final Draft
Final draft documents that could become part of a regulatory docket file but are not submitted for a formal public comment period should contain the following notice:

Final Draft Notice
This report is an external draft for review purposes only and does not constitute U.S. Environmental Protection Agency (EPA) policy.

Final Products
If agreement is reached, following review, that a draft product is appropriate for release as an EPA publication, the following statement should be included:
Notice
The U.S. Environmental Protection Agency through its Office of (funded and managed) or (partially funded and collaborated) in the research described here under (contract number) or (assistance agreement number) to (name). It has been subjected to the Agency's review and has been approved for publication as an EPA document.

Internal Use
Final documents for internal use by a requesting program office should contain the following notice:
Notice
This document is intended for internal Agency use only.

Journal Articles
EPA encourages independent publication of research results in refereed journals. The article should include the following statement:
Notice for Journal Articles
The U.S. Environmental Protection Agency through its Office of (funded and managed) or (partially funded and collaborated) in the research described here under (contract number) or (assistance agreement number) to (name). It has not been subject to Agency review and therefore does not necessarily reflect the views of the Agency. No official endorsement should be inferred.

Conference Proceedings
In documents such as conference proceedings that include articles by non-EPA individuals expressing their own opinions, a disclaimer like the following should appear:

Notice for Conference Proceeding
The material in this document has been subject to Agency technical and policy review, and approved for publication as an EPA report. The views expressed by individual authors, however, are their own, and do not necessarily reflect those of the U.S. Environmental Protection Agency.

Trade Names and Commercial Products
In all cases where particular companies, trade or service names, product names, or other commercial references are cited, a disclaimer such as the following is essential:
Notice
Mention of trade names, products, or services does not convey, and should not be interpreted as conveying, official EPA approval, endorsement, or recommendation.

Notice
The U.S. Environmental Protection Agency through its Office of (funded and managed) or (partially funded and collaborated in) the research described herein under (contract number) or (assistance agreement number) to (name). It has been subject to an administrative review but does not necessarily reflect the views of the Agency. No official endorsement should be inferred. EPA does not endorse the purchase or sale of any commercial products or services.

Copyright Notices

When permission to use copyrighted material has been obtained and the material is used in an EPA document, the copyrighted material should be identified by the following statement or equivalent:

Notice

Reprinted from (title of publication, year of first publication) by (name of author) with permission of (name of copyright owner).

Documents that contain copyrighted material should include on the Notice page (page ii of the front matter) one of the following statements: *(1) This document contains copyrighted material on pages (list pages), or (2) This document is copyrighted in its entirety by the author, or (3) This document is copyrighted in its entirety by the author. In addition, it contains copyrighted material from sources other than the author on pages (list pages).*

Copyright Announcement

If assistance agreement recipients or contractors copyright their work, they should use the copyright announcement so that the project officer knows that permission is required if someone outside the government wants to use the document. The announcement should contain the symbol © or the word "Copyright," the year of first publication of the work, and the name of the owner of copyright in the work.

Example: © 1995 John Doe

Notices for Products Produced by Post Doctoral Program Employees

A credit statement similar to the following should be included with the author/affiliation credit:

Work was performed at the (L/C/O), U.S. Environmental Protection Agency, (Location), through participation in the (sponsoring organization) Postdoctoral Research Program.

Notice for Reports

Example Notice

The U. S. Environmental Protection Agency through its Office of (funded or managed the work) funded the research described here. It has been subject to Agency review and approved for publication. This research was supported in part by an appointment to the Postdoctoral Research Program at the (Laboratory where the work was done), administered by the Oak Ridge Institute for Science and Education through Interagency Agreement No. (____) between the U. S. Department of Energy and the U. S. Environmental Protection Agency.

Notice for Articles Published in Refereed Journals

Example Notice

The U.S. Environmental Protection Agency through its Office of (funded the work) funded the research described here. It has not been subjected to Agency review and therefore does not necessarily reflect the views of the Agency, and no official endorsement should be inferred. This research was supported in part by an appointment to the Postdoctoral

Research Program at the (Laboratory where the work was done), administered by the Oak Ridge Institute for Science and Education through Interagency Agreement No. (____) between the U.S. Department of Energy and the U.S. Environmental Protection Agency.

Foreign Government's Copyright Notice

Although employees of the U.S. Government who write documents as part of their official duties cannot claim copyright in the work in the United States, the national copyright law of another country might allow the document to be copyrighted. Therefore a copyright notice should be as follows:

This is a work of the U.S. Government and is not subject to copyright protection in the United States. Foreign copyrights may apply.

Web Server and Multimedia Products
The EPA Web Server and most Agency multimedia documents should carry a Disclaimer of Endorsement and a Disclaimer of Liability. These disclaimers address references to commercial products and services, as well as merchantability and fitness for purpose. Sample disclaimers can be found on the Federal World Wide Web Consortium disclaimer template page at http://www.epa.gov/webguide/create/disctemp.html.

Authorities: Internal and External

The legislative, regulatory and other formal policy issuances governing EPA communication products and procedures described in this Stylebook are taken from a compilation of sources. For your reference, these numerous sources are listed in Appendix A. The Headquarters' Office of Public Affairs has the authority for revising and updating the guidance contained in this Stylebook.

With regard to print and web publishing, Title 44 of the United States Code constitutes the broad legal framework for all Government publishing. Three basic provisions of Title 44 deal with the authority of the Joint Committee on Printing (JCP) of the Congress of the United States and the U.S. Government Printing Office (GPO) as described below.

• The JCP has broad authority to regulate the printing and distribution of publications by Government agencies. The JCP issues the "Government Printing and Binding Regulations," a document whose directives govern the procurement and distribution of all Government printing. With limited exception, all printing, binding and blank book work for the Government is to be done at the GPO or in authorized departmental printing plants or procured through GPO-contracted sources.
• The Public Printer (head of the USGPO), through the Superintendent of Documents (SOD), is authorized to print additional copies of any nonconfidential Government publication for sale to the public.
• The USGPO administers the Depository Library Program. Through this program, over 1,700 depository libraries throughout the United States receive Government publications free of charge. The GPO determines what publications should be distributed through the Depository Library Program for orders placed through GPO and its contracts, and bears the printing and binding costs of the depository copies.

It should be noted, however, for products produced independently of the GPO, i.e., by in-house copy centers or desktop office printers, agencies are required to make the determination and bear the printing costs of copies for depository library distribution.

In order to fulfill the requirements of Title 44 and associated OMB Circulars, EPA established numerous procedures, policies and directives. This Stylebook provides guidance on how EPA employees can meet these requirements.

The government may be subject to liability for misuse of the literary or intellectual property (patents, trademarks, proprietary information) of others. Writers and editors should observe the guidelines given in this section.

Training and Education Guide

Overview

Most of us have heard recent EPA Administrators say that we should move away from "one-size-fits-all" regulation, to more targeted regulatory work that fits specific industries or population segments. That same idea applies to learning about communications. Every person in the world needs to communicate, but professional communications is distinct from that of everyday life. Equally, having a general understanding of professional communications is important for managers, but is vastly different from the type of skill that is needed to create successful communications materials. One "size" of training does not fit all.

It is the policy of EPA that our staff should have – and develop – good communications skills. While the importance of such skill-building cannot be overstated, neither can the importance of targeting that growth in a way that is appropriate to specific needs and jobs. A basic writing or introductory public speaking course might help any of us. Most professional communicators have already had that level of education, so their development should have a different focus from that of other, more occasional communicators.

Staff who manage contracts for communications work will do well both in building their skills as a Project Officers and learning design or production. A range of other studies can be as useful as learning writing or design.
- Audience analysis and targeting depends on disciplines such as demographics and statistics.
- Media selection entails geography…"reach people where they are" is an axiom of marketing. To do that, you need detailed knowledge of where the "where" is.
- Marketing, itself, is highly important. It is mainly strategic communication oriented to action.
- Probably no industry depends more than communications on having very strong computer skills.

All of us should be open-minded to such possibilities, making the right choices for ourselves, and for those we might supervise. Full-time professional communicators at EPA – Communications and Public Affairs Directors, Product Review Officers, Web Content Managers and others – should take responsibility for helping each other and relevant staff to find the right opportunities for such training. All supervisory, managerial and executive staff should consider it a duty to foster such development – including for themselves. Few EPA programs can be well managed without good public communications as a cornerstone.

Education and training does not require a classroom or on-line course. It is still possible to learn something useful just through independent reading. It might not be as targeted or well directed, but it is cheap, reliable and does not require you to complete any paperwork. Peer consultation can help you target and direct your education.

The information below is meant to be basic, not comprehensive. No matter where you work in EPA, once you get past the basics, you should consult with communications professionals and management about the types of educational opportunities that are best. Remember that "basic" means different things for different needs and jobs. What is basic for a full-time communicator is probably quite advanced for someone who has just occasional involvement in the work. Whether it is in communication, or any other area of training, you should develop a real program that suits you, your job needs, those of your office and the future of all.

Basics

Basic writing courses are not always basic to all writing. A course titled "Basic Business Writing" is probably oriented to your learning how to compose memoranda. Important, but not usually a key to mass media effectiveness. Basic Technical Writing might sound ideal for many aspects of EPA communication, but that will depend on whether the course teaches how to do technical writing, or how to work with technical writing to make it comprehensible to non-technical audiences.

You, in turn, will need to decide which – if either – will serve your program. By analogy, the above ideas apply to design, too.

In any case, true basic writing and design courses are available through the USDA Graduate School. Other good basic writing and communications courses are taught at almost all community colleges.

Courses in "Plain English" are usually good in general and useful for EPA public communications. The EPA Headquarters Web Team conducts a course several time each year called "Writing For The Web". It is what the title indicates, but is based mostly on the principles of Plain English. Access a description at http://aarbweb.nvfel-pmn.epa.gov/support/communications/webguide/guidewebwriting.htm.

Courses that have titles like Writing for Mass Media need to be scrutinized carefully. Many are basic journalism courses. Journalistic style serves many EPA needs, but it is not particularly oriented to motivating action. If you want people to learn, this is good, but if you want them to act, that is another matter. A style of communication that is more oriented to marketing is probably not a basic course in any event. Effective advertising and promotional style takes a while to learn, and – most important – takes even longer to learn in a way that is suitable to the subject matter of EPA.

Courses generally titled "Crisis Communication" and "Risk Communication" are useful – and in some ways basic – to some EPA communications needs, but note the word "some". Yes, crisis and risk scenarios are core to EPA, but the principles of those communication styles are not applicable to all facets of our work.

For most EPA managers, or Project Officers who manage communications projects or contracts, it is as important to be grounded in the basics of marketing as in the basics of creating actual communications materials. Your orientation from that perspective will not be in directing writers and designers in how to write and design, but rather in directing them to achieve a marketing goal – motivating action by the public. Comment in detail on a proposed regulation. Get involved in a watershed planning committee, or local emergency planning committee. Buy and use safer, greener products. In every case you want a deliverable that delivers results. The Direct Marketing Association of America provides basic and advanced studies that are oriented to such communications.

There are some specialized courses that are nonetheless basic. For example, once you have learned the technical aspects of using certain software, such as PowerPoint, or In Design, learning how to use them as effective communications formats is still down the road a bit. Similarly, there are courses in basic screen writing and promotional writing. They are advanced in the sense that they are not just general writing principles, but introductory courses in those areas can help a grounded writer know some basic techniques for certain specific media and formats.

Finally, in Appendix A of this stylebook, you will see the bibliography of materials which we use in the communications offices of EPA. They are the basic text and on-line resources that are used, and are useful, every day for most of our Agency communications.

Production

In recent years, EPA has gradually reduced the amount of in-house pre-production work that it does, except for Web and computer-based communications. Most pre-production and production work now is done under contract, but there is still significant in-house work done through desktop publishing software. The more often used formats are discussed in various sections of this manual, but even if you are contracting with a commercial supplier, understanding production is still important. You should rely on full-time experts within the Agency to guide you to get the most cost-efficient, cost-effective work, but ultimately the project officer is responsible for the work, so understanding the mechanics and technology of video, print, exhibit and promotional production is crucial.

Even among those in the industry, much of this part of the business is learned by doing, but for some academic background you can use these resources:

Institute for Federal Printing and Electronic Publishing (www.gpo.gov/ifpep/index.html). IFPEP 2008 Course Catalog (www.gpo.gov/ifpep/pdfs/2008catalog.pdf) Continuing education courses in video production are offered in many communities, especially through their community cable-TV studios and those at the community college. This might not enable you to become a producer, but can be beneficial for managing production contracts as a project officer.

Who's Who & Networking Through EPA

Who's Who & Networking Through EPA Communications

All of the EPA Offices of Assistant Administrators and Regional Administrators, and most of the Offices of Associate Administrators have a staff in the immediate office that is responsible for communications policy and development. This staff should always be informed of public communications activities or public communications product development that is undertaken by any EPA staff member. They always should be consulted about undertaking such activities at the very earliest point at which such undertaking might be contemplated. In public communications, situations that present serious problems are, almost without exception, those which have been developed to some advanced stage without the involvement of the senior communications personnel. Those staffs comprise, at least, a Communications Director or Public Affairs Director, a News Media Director and a Product Review Officer, as well as additional staff.

Within the Office of The Administrator of EPA, the Office of Public Affairs has responsibility for:
- Developing communications for the Administrator and Deputy Administrator
- Developing and managing primary communications policy for EPA
- Coordinating and developing cross-agency communications programs
- Reviewing and approving public communications materials Agency-wide
- Developing, coordinating and overseeing all procedures to implement the above

Some offices have communications staffs at the staff office or division level, as well as at the AA / RA level. Where there are such offices they should be informed of, and consulted about, any public communications undertaking.

Other EPA offices are involved with internal EPA communications and in providing communications services and support for public communication. They include Printing Management (OARM), Web Development (OEI) and Acquisition Management (OARM).

Any staff member who is, in any way, developing communications materials by working with those offices must ensure that the Offices of Public Affairs or Communications know that such work is being done. That includes implementing any contract or purchase for communications work – or any task order within some more general contract.

Coordination of Web, News and Other Media

The policies and style relating to development of communications – other than Web and news – are the substance of this Stylebook, but the principles that govern development of EPA communications in all media, including news and Web have more areas of overlap than divergence.

Throughout this Stylebook you have read references to, and information from, the EPA Communications Product Review process. In general this manual and that process are complementary. In most instances they are necessarily integrated and related. They comprise the policy and procedure for creating and producing communications materials in public media – other than Web and news material. General procedures for development of Web and all other non-news public media are found at http://www.epa.gov/productreview/guide/index/.html

Standardizing the procedures for development of information materials is a process which relates largely to communications management. Effective communications in large organizations basically requires that such procedures are established. All those who regularly develop communications materials for the Agency should know those procedures well. It is helpful for all those who do such work even occasionally.

At the core of that process to help all EPA staff communicate better are the Program and Regional Product Review Officers. When in doubt contact these officers as listed in the URL-address above. In many cases the Product Review Officer and Web Content Manager is the same person. In all cases, they coordinate and communicate regularly with each other and with their related news media staffs.

Appendices

Appendix A: Bibliography and Sources for this Manual

Writing

EPA On-line Resources:
AP Stylebook, access via the EPA Intranet *AP Stylebook*: an on-line version of the *AP Stylebook* (copyright 2003) available to EPA employees with access to the EPA Intranet: http://www.epa.gov/productreview/guide/apstylebook.html

EPA's Product Review Site: explains product development and review for all media, including print, Web, audio-visual, and displays: http://www.epa.gov/productreview/index.html

External to EPA On-line Resources:
U.S. Government Printing Office Style Manual: ("About" page), the GPO's printer stylebook contains rules for preparing products to be printed by the GPO: http://www.gpoaccess.gov/stylemanual/about.html

AP Stylebook's Frequently Asked Questions: the Associated Press Stylebook's on-line resource for questions and answers: http://www.apstylebook.com/ask_editor.php

Merriam-Webster's On-line Resources: includes a dictionary, thesaurus, Spanish-English dictionary, word of the day and more: http://www.merriam-webster.com/

Plain Language: site provides guidance/instruction and training materials for writing in plain language across the federal government: http://www.plainlanguage.gov/

Print Resources
The Associated Press Stylebook, 2007, The Associated Press publisher
The Elements of Style, by William Strunk,Jr. and E. B. White, Fourth Edition, 2000, Allyn & Bacon
Merriam-Webster's Collegiate Dictionary, 10th Edition, 1998, Merriam-Webster publisher

Production/Pre-Production References

United States Code and Federal Government Regulations
- Title 44 of the United States Code, Public Printing and Documents, contains the broad legal framework for all Government publishing.
- Joint Committee on Printing, Government Printing and Binding Regulations, contains the authority for Government printing and binding.
- OMB Circular A-25 describes free distribution of Government documents.

EPA Orders and Transmittals (intranet.epa.gov/rmpolicy/ads/orders.htm)
- Order 1000.25, Use of Recycled Paper, states: ". . . contractors use recycled paper for all reports required for delivery to the Agency."
- Order 1015.1B, EPA Identification Signs at Project Sites, applies to "sites of projects which are operated or sponsored by EPA" and applies to "publicly visible construction site and demonstration project". It prohibits the appearance of "names of Program Offices".
- Order 1015.2A, EPA Seal and Agency Identifier, governs "visual communications" and emphasizes: "...all organizational units use . . . this order and those in the EPA Graphic Standards System Handbook . . ." It names the Director of the "Office of Public Awareness" (now, Office of Public Affairs) as responsible for: "implementation and continuous management of the EPA Graphic Standards System including supplements and revisions to the standards handbook" and the "granting or denying" of exceptions. This Order states in part:

3. a. "Use of the Official Agency Seal will continue on all stationery and on flags, buildings, and project identifications signs. Use of the Seal is optional on calling cards and official Agency reports, such as reports to Congress, foreign governments, and other Federal agencies."

3. b. "The Agency will use the Agency Identifier on all brochures and other printed matter."

3. c. "This Agency will not use any visual identification forms other than those…in this Order."

The Order also prohibits the use of EPA symbols for "commercial purposes" or for "promotion or sale" of private goods/services.

•Order 1440.7 -- Hazard Communications, establish "minimum requirements" for the hazard communication program.00.4A, EPA Publication Review Procedures, establishes policy and procedural requirements for the review of materials published or issued by the EPA and that the aforementioned have been "developed using methodology which will achieve high quality results". This order seeks to "clarify EPA responsibilities for information published or issued" and provides for the "expeditious approval" of publications. With regard to decentralization, it empowers senior staff at Office and Regional level with responsibility for "substance, form and policy implications" of materials and provides these officials with wide latitude for them to "establish internal review procedures and controls" for quality and provides for use of a formal concurrence form. With regard to centralization, it requires forwarding of "any material that has policy implications" to the Office of External Affairs, a.k.a. Office of Public Affairs.

•Order 2510.1, Policy for the Procurement of Employee Business Cards, provides guidance on using EPA appropriated funds to procure employee business cards.

•Order 4800.1 A1, EPA Policy for Providing Wearing Apparel to Employees, establishes "parameters" so that staff may "effectively represent the Agency and perform job-specific critical activities" and aims for apparel "that is distinctive and easily recognizable." Senior staff will "specify descriptions, colors, and circumstances" for apparel to be worn.

•EPA Information Policy, EPA Classification No. 2182.0, CIO Transmittal No. 08-003, Children's Privacy and Children's Copyright, protects the privacy of children.

•EPA Information Policy, EPA Classification No. 2181.0, CIO Transmittal No. 08-002, Posting Copyrighted Works on EPA Web Site, established EPA policy regarding the appropriate use of copyrighted works.

•EPA Information Policy, EPA Classification No. 2171.0, CIO Transmittal No. 08-006, Information Access Policy, describes coordination publications with GPO and how EPA must also submit government-sponsored scientific, technical, engineering and related business information to the National Technical Information Service as required by federal law, regulation or policy.

•EPA Information Policy, EPA Classification No. 2191.0, CIO Transmittal No. 06-012, Web Governance and Management, establishes policy for EPA to operate and maintain a public access Web site to assist in fulfilling the Agency's mission. NSCEP maintains the web site for all of EPA's publications.

EPA Manuals and Miscellaneous References

http://intranet.epa.gov/rmpolicy/ads/manuals.html

•Communications Manual, No. 1500

•Contracts Management Manual, Section 13.3, use of the Government bankcard for printing.

•Contracts Management Manual, Section 13.2, Procurement of Novelty Items for Distribution to the Public and/or to EPA Employees, provides guidance regarding the purchase of novelty items to be distributed to the general public and/or to EPA employees.

•Printing Manual, 4822, describes the policies and procedures for the preparation, procurement and distribution of printed and other reproduced written materials by EPA employees.

•"Promotional Communications for EPA, Guidance for EPA Staff," May 2008, produced by OPA, this manual sets forth policy and guidance for the use of promotional products in EPA communications programs.

•"EPA Best Practices Guide for Conferences," November 12, 1998, co-chaired by OCIR, OSWER and OW and produced by the Conference Guidance Workgroup, this manual describes printing of conference materials.

•EPA Memorandum dated January 19, 2001, issued by the EPA Deputy Administrator, describes EPA policy for environmental standards for EPA paper and publications.

EPA Regulations

http://intranet.epa.gov/oamintra/policy/epaar.pdf

Acquisition Regulation (EPAAR) 1552.208-70, clauses regarding printing by contractors and includes:
(a) Printing, composition, camera copy, desktop publishing, microform, duplication and requirement definitions; (b) Prohibitions; (c) Affirmative requirements for double-sided coping and use of recycled paper;(d) Permitted contractor activities;(e) Violations; and (f) Flowdown provision.

EPA Printing Management Circulars

•Circular 02-03, EPA/202/N-92/004, describes the policy regarding the use of coated paper stocks.
•Circular 03-03, EPA/202/N-92/004, describes use of the Government bankcard for photocopying needs.

Glossary of Terms

A

Abstract: There are two types of abstracts used in EPA documents. The indicative (descriptive) abstract tells readers what the report is about.   An informative abstract reports the hypothesis, methods, results, and conclusions of research detailed in the text.

Advertising specialty (see: Promotional product)

Artwork - A general term used to describe photographs, drawings, paintings, hand lettering, and the like prepared to illustrate printed matter. Artwork also refers to digitally supplied documents that are ready to be output to film, printing plates or digital output via ftp, or by email.

Audiovisual - Generic term for media and format that employs pictures and sound. When used specifically it commonly refers to a still picture format (slide show) as opposed to motion pictures.

B

Bitmapped - An image that has a too low resolution or linescreen for the output resolution ("That image looks bitmapped."); line art scanned at 72dpi when it is to be printed at 2540dpi will be very coarsely bitmapped).

Bitmapped font - a font made up of bitmapped letters, characterized by jagged edges, as opposed to smooth edges

Binding - the various methods used to secure loose leaves or sections in a book; e.g. saddle-stitch (also called stapling), perfect bound.

Booth - (see: exhibit)

Blog - a Web site that contains an online personal journal with reflections, comments, and often hyperlinks provided by the writer or hosting organization. EPA's blog can be accessed at http://blog.epa.gov/blog/.

Blueline proof - a now outdated proofing process. This term refers to a proof made from the actual printing plates, so-called because of its blue color. Now a high-quality full color proof is provided, usually now referred to as the "final proof." This is chance to get one more look at a printing job before it goes to the press.

Broadcast - Technically a program that is transmitted via radio-frequency signal to receiving locations such as televisions or radios. Generally used to refer to publicly available television and radio programming, as distinct from narrowly available programming such as a teleconference from an office to a convention site. Commonly, but incorrectly, used to refer to any program that is received via television or radio.

Brochure - see: collateral material)
Bleed - layout, type or pictures that extend 1/8" beyond the trim marks on a page that designers must allow if they want images, that are butting up to the edge of the page, to be cropped properly.

C

Calendar - (see: planner)

Camera ready - artwork or pasted up material that is ready for reproduction.

Caption - Also called a cutline. The lines of text referring to information identifying a picture or illustration.

Character generator (CG) - Subset of titles (see: titles) Refers to a process for creating titles

CMYK - Cyan, Magenta, Yellow and Black (CMYK) are the four primary printing inks that make up any full color printing job. Also known as the four process colors.

Collateral material (also: Collateral media, promotional print) - Printed material, generally controlled by and published by an organization to support its communications efforts. Sometimes used to include promotional and display material. This is the general category of the most commonly used and familiar public print materials – booklets, brochures, fliers, folders, leaflets, pamphlets, pocket-cards, postcards, posters and some display and promotional materials.

Comp - a layout that has been mocked up to show how the different elements of the design will look when the job has been printed. This could range from a rough sketch, to a fully formatted digital layout or printed proof.

Concept - a design concept is the graphic designer's idea or solution to a client brief. Often a designer will produce more than one concept, so that the client can have a choice.

Color separation - The process whereby the four (CMYK) process printing colors are separated into their primary colors to allow for professional printing.

Color correction - The process of adjusting an image to compensate for scanner deficiencies or for the characteristics of the output device.

Color proof - A representation of what the final printed composition will look like. The resolution and quality of different types of color can vary greatly.

Crop marks - lines printed showing the dimensions of the final printed page. These marks are used for final trimming.

Cropping (photo) - to trim an image to a size that best enhances the contents or to make it fit into the allocated space in the design. Cropping an image can be achieved digitally in an image editing program such as Photoshop, or it can be imported into a page layout package, such as InDesign, and trimmed there.

D

Density - The degree of opacity of a photographic image on paper or film.

Deckle edge - The rough or feathered edge of paper when left untrimmed.

Die Cutting - The process of using sharp steel rules to cut special shapes into printed sheets.

Digital video disc (DVD) - Technically a disc that carries a digitally recorded video program. Commonly used to mean a program that is distributed on such a disc.

Director - The person with chief responsibility for on-set and post-production development of an audiovisual program

Display - (see exhibit)

Double page spread - two facing pages of booklet, newspaper or magazine where the textual material on the left hand side continues across to the right hand side. Abbreviated to DPS.

Dots-per-inch (also known as DPI) - A measure of output resolution produced by printers or monitors.

Drop shadow - A drop-shadow is the shading effect used to give the appearance of raised type or graphics on the designed page.

Drop cap - a large initial letter at the start of the text that drops into the line or lines of text below.

Dummy - a sketch of a page showing the position of text and illustrations and giving general instructions.

Duotone - A black and white photographic image that has been given a color tint, by duplication the image onto a second color channel.

E

E-bulletin - An online news publication or periodic update posted on the Internet or sent to interested parties via e-mail.

Editor - The person in an audiovisual post-production crew who assembles the production elements of footage, images, effects, etc in the detailed sequence that creates the final produced program.

EFX (also FX) - Common abbreviation in audiovisual production for "effects" (SFX for "sound effects")

Embossing - A process performed after printing to stamp a raised (or depressed) image into the surface of paper, using engraved metal embossing dies, extreme pressure, and heat. The effect can also be simulated digitally using software such as Photoshop.

EPS - Encapsulated PostScript is a vector format designed for printing to PostScript printers and imagesetters. It is considered one of the best choices of graphics format for high resolution printing of illustrations. EPS files are typically created and edited in illustration programs such as Adobe Illustrator.

Exhibit (also Display) - A relatively large, usually three-dimensional, communications product; can range from table-top size to a small building; essentially a multi-media product that presents a broad message for an organization to be viewed by people in a personal and/or interactive setting

F

Fact sheet - Provides information about an issue, project or activity to someone who could have limited knowledge of the issue, project or activity. Needs to be limited to one page in length and focus on the issues of highest importance.

Field guide - (See tool kit)

Final Proof - once called a "blueline" this is now a digitally generated full color proof.

Flush left - copy aligned along the left margin.

Flush right - copy aligned along the right margin.

Flyer - (See: collateral material). An advertising circular.

Font - Any (digital) typeface that can normally be rendered in a variety of sizes.

Footage - The raw material of produced continuous images which are assembled to create a motion picture.

Four color process (also, full color) - The four basic colors of ink (CMYK--yellow, magenta, cyan, and black) which reproduce full-color documents.

G

Gaffer – The electrician on an audiovisual production crew

GIF – Graphics Interchange Format; a compressed image format. GIF was the first commonly used image format on the Web, but it has been largely replaced by JPEG.

Grayscale - a range of luminance values for evaluating shading through white to black. Also, a term used when referring to a black and white photograph.

Grip - A stagehand on an audiovisual production crew

Gutter - The inside margins or blank space between two facing pages of a magazine or book is called the gutter.

H

Hang-tag - Promotional print item with a cut-out portion that permits it to be hung on a doorknob or other hanger.

HTML (Hypertext Markup Language): The set of markup symbols and codes inserted in a file intended for display on a World Wide Web browser page.

I

Illustrator - Adobe Illustrator is a vector-based drawing program. It is used to create print quality line-art drawings, such as logos, illustrations and maps. Although it uses its own proprietary file format, .ai, Adobe Illustrator can also save files in .EPS format for importing into page layout programs.

Images - Graphics, photography, artwork or individual frames from a motion picture

Imposition - the arrangement of pages on a printed sheet, which when the sheet is finally printed on both sides, folded and trimmed, will place the pages in the proper sequence.

InDesign – the professional design/layout program which has become the industry standard in print publishing.

J

JPG (Joint Photographic Experts Group) - the most common image compression format used by digital cameras.

K

Knockout - A shape or object printed by eliminating (knocking out) all background colors. Contrast to overprinting.

Kerning - The narrowing of space between two letters so that they become closer and take up less space on the page.

L

Laminate - A transparent coating applied to printed sheets to give either a shiny (gloss) or neutral (matt) finish. Usually used on the outer covers of brochures or heavy, single sheet, printed materials

Layout - A rendition that shows the placement of all the elements, images, thumbnails etc., of a final printed piece.

Leading - Space between lines of type. The distance in points between one baseline and the next.

Letterpress - Printing that utilizes inked raised surfaces, usually type, to create the image.

Letterspacing - The addition of space between typeset letters.

Logo (logotype) - A graphic design, often simply distinctive lettering that identifies a particular organization; related to brand and trademark

M

Manual - An instruction handbook.

Masthead - Magazine term referring to the printed list, usually on the editorial page of a newspaper or magazine, that lists the contributors. Typically this would include the owners, publishers, editors, designers and production team.

Media: A medium of communication (for example: Print, broadcast, Web) that is designed to reach the mass of the people.

Motion picture - Technically can refer to any format that produces moving pictures (movie film, videotape, video-disc, etc.); commonly refers to film production.

Multi-media - Technically any communications product or format that combines more than one specific format or medium to create a unified presentation. Commonly refers to audiovisual productions, but many exhibits and displays are multi-media. Audiovisual productions can be parts of larger multi-media products.

N

Native files – The files that were used to originally create the document, i.e., Photoshop, Illustrator, Word, etc.

Native format: The default file format used by a specific software application.

O

Offset printing The most commonly used printing method, where the printed material does not receive ink directly from a printing plate but from an intermediary blanket that receives the ink from the plate and then transfers it to the paper.

Opacity - Quality of papers that defines its opaqueness or ability to prevent two-sided printing from showing through.

Overrun - Quantities of sheets printed over the requested number of copies.

P

Pagination - The process of performing page makeup automatically.

PDF (Portable Document File) - Adobe's PDF is a universal electronic file format, modeled after the PostScript language and is device- and resolution-independent. Documents in the PDF format can be viewed, navigated, and printed from any computer to almost any printer regardless of the fonts or software programs used to create the original. Printing industry workflows are now primarily PDF-based.

Perfect Bind - A type of binding that glues the edge of sheets to a wraparound cover.

Pixel - Short for "picture element." A pixel is the smallest resolvable point of a raster image. It is the basic unit of scanning and digital imaging.

Planner - A calendar that provides information – or places to insert information— about numerous dates of interest to a specific audience NOTE: EPA may not print general calendars, but may print planners.

Platform: An underlying computer system on which application programs can run. For example, a Dell computer running Windows XP runs on a Windows platform. An iMac computer runs on the Macintosh platform.

PMS (Pantone Matching System) - Color charts that have more than 1000 preprinted color patches of blended inks, used to identify, display, or define colors. PMS is the standard ink color system used by commercial printers. Ask to see/use a PMS swatchbook when specifying ink colors for your job.

Podcast - A music or talk program made available in digital format for automatic download over the Internet to a personal mp3 or digital device.

Poster - (See collateral material)

PostScript - A page description language developed by Adobe Systems to describe a page image for printing. It handles both text and graphics. A PostScript file is a purely code-based de¬scription of a page.

PowerPoint Presentation - A common trademarked and copyrighted production format for presentation graphics that provides the ability to create output for overheads, handouts, speaker notes and film recorders.

Preflighting - The evaluation and analysis of every component in a file needed to produce a printing job. Preflight confirms the data being submitted, color gamut, color breaks, and any art required, plus layout files, fonts, image files, proofs, page sizes, print driver, cropmarks, etc.

Pre-production - The technical preparation of verbal and visual elements of the final product before they move into actual production.

Preface - The author's own statement about the work; might include such information as the reasons for undertaking the work, the research method (if it might bear on the reader's understanding of the text), or the limitations within which the subject was studied.

Press proof - a copy obtained from inked type, plate, block or screen for checking purposes; a reasonably accurate sample of how a finished piece is intended to look.

Printer spreads - Each page needs to be printed next to it is true opposing page, versus the way it will look in the end after it is bound. Use your mock version as your guide and double check with the printer to make sure you are doing it right before you create the printer spreads.

Proceeding - usually derived from the presentation of a paper and from the questions, answers, and general discussion at conference sessions

Process printing - Printing from a series of two or more plates to produce intermediate colors and shades.

Producer - The person and/or organization with overall responsibility for creating and producing an audiovisual program. This generally implies all financial, legal and logistical responsibility including hiring staff, cast and crew, buying or providing all equipment and travel, overseeing creative development and production scheduling.

Product Review - EPA's product review system is the communication management process that requires each program and regional office to ensure Agency communications serve the public interest and the immediate interests of intended audiences, as well as to ensure messages are coordinated fully across the Agency to convey EPA operations and policy with the highest degree of consistency and accuracy.

Project report - Most EPA research is documented and made available to the research community in a project report.

Promotional product (also Advertising specialty, Promotional item, Promotional, three-dimensional) - A tangible product (of some intrinsic material value) which is also a communications medium, bearing a message to advertise, promote or inform about an idea, product or service.
(Subsets include: Award, Incentive, Premium, Souvenir)
(Colloquial/pejorative: Handout, Gadget, Give-away, Novelty, Trinket)

Prop (also: Property) - An item that is used by someone appearing in an audiovisual production (e.g., an umbrella, a coffee cup), other than fixed elements in the set such as furniture.

PROTRAC - The software system which tracks work through the Product Review process.

Public service announcement - A brief presentation of a message by a non-profit organization via broadcast media. The term "public service" should be understood to mean that it is in the interest of and for the benefit of the public, and the time allocation for which is provided free of charge by the broadcaster. (Subset of public service advertising which can include print media.)

Q
Quire - (noun or verb): Sheets of paper making a pamphlet or booklet folded together in a single fold, but not bound or stitched

R
Radio frequency: The standard band of signal frequency (usually expressed in Herz/Hz) for transmitting broadcast signals in radio, television and wireless communicators

Ream - Five hundred sheets of paper.

Registration - The positioning of two or more printing images in exact alignment with each other. Printing that is correctly positioned on the page is said to be "in register." Four-color printing is in register, for example, when all four successive colors are aligned, one on top of the other, so that they produce a single image with no color gaps or overlaps.

Registration marks - Crosses or other targets applied to original copy prior to photography. Used for positioning films in register, or for register of two or more colors in process printing.

Research report - A book-length presentation of the best of EPA's research findings.

Resolution - the measurement used in typesetting to express quality of output. Measured in dots per inch, the greater the number of dots, the smoother and cleaner appearance the character/image will have. Photographs need to be scanned at a resolution of 300 dots per inch. Screen resolution is 72 dots per inch and something that looks wonderful on your computer screen or on the Internet will look terrible when printed.

RGB (red, green, and blue) - The primary additive colors used in display devices and scanners. Commonly used to refer to the color space, mixing system, or monitor in color computer graphics.

Reverse - The opposite of what you see. Type your name on a white sheet of paper in black ink. The reverse of this would be a black piece of paper with a white name.

S

Saddle stitching - a method of binding where the folded pages are stitched through the spine from the outside, using wire staples. Usually limited to 64 pages size.

Sans serif - a typeface that has no serifs (small strokes at the end of main stroke of the character). Helvetica and Arial are examples of sans-serif fonts.

Scenario - A narrative description of all sequences and major scenes in the order presentation that will constitute the storyline of an audiovisual presentation.

Script - In audiovisual media a text that contains all spoken language plus written description scene-by-scene in sequence of all principal verbal, visual, audio and effects elements that will constitute an audiovisual presentation. Generally the text of a message to be presented principally via spoken word, as with a lecture or speech.

Separations - The four screens corresponding to the percentages of cyan, magenta, yellow and black used to define colors that are used to create the final printed colors, usually for a color photograph.

Serif - a small cross stroke at the end of the main stroke of the letter. Times New Roman is an example of a serif font.

Set - The specific area that is the physical setting of an audiovisual production or of a scene within it.

Setting - The general area (or time) in which an audiovisual production is set (the Arctic, a schoolyard, the 1980s).

Sheet fed - a printing press which prints single sheets of paper, not reels.

Signature - A printed sheet with multiple pages on it that is folded so that the pages are in their proper numbered

sequence, as in a book.
Spine - the binding edge at the back of a book.

Spot announcement - Generic phrase meaning a commercial or public service announcement.

Stock - a term for unprinted paper.

Stock Art – Royalty-free photos that can be purchased for use in a publication.

Swatch - a color sample.

T
TIFF (Tagged Image File Format) - a TIFF is a cross-platform graphics file format that is highly used in graphic arts.
Tabloid - 11" x 17" - a page half the size of a broadsheet, or twice the size of a sheet of standard paper.

Tint - the effect of adding white to a solid color or of screening a solid area.

Titles - Generally any words that appear on screen in a finished audiovisual production.

Tool kit - A set – as applied to communications work – of articles, printed matter, teaching devices, etc. – for a specified audience and/or message

Treatment - A narrative description of an audiovisual presentation that details all the main ideas and major sub-texts, along with a general description of the visual presentation that will be made of those ideas.

Trim - the cutting of the finished product to the correct size. Marks are incorporated on the printed sheet to show where the trimming is to be made.

Typeface - A complete set of characters forming a family in a particular design or style.

Typography -The technique of arranging and emphasizing type, type design and modifying type symbols.

U
Up - A term used to describe how many similar pieces can be printed on a larger sheet; two up, four up, etc.

V
Varnishing - a finishing process whereby a transparent varnish is applied over the printed sheet to produce a glossy finish.

Vector graphics - A vector is a mathematically calculated method of plotting accurate lines and curves. Unlike bitmap images, it is resolution independent and allows graphics images to be enlarged to any size, without any loss of quality. Programs such as Adobe Illustrator, Macromedia Freehand, Flash and CorelDraw all use vector graphics formats to save files in, such as .EPS SWF and various CAD file formats.

Video - General term for an audiovisual program – usually a motion picture – that is produced in a digital format

Videocast - A video produced for the Web and made available for streaming and/or download onto a personal mp3 device.

W

Web safe colors - Color palette consisting of a collection of 216 colors which remain consistent across Macintosh and Windows based computer screens, without dithering.

Webinar - An online seminar that might contain audio and video.

Workbook - A booklet containing problems and exercises that a student or reader may work directly on the pages.

XYZ

Communication
Product Standards

STYLEBOOK
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