EPA Web Standards

EPA's Web Standards govern content and formatting on EPA's website. The Web Style Guide, shows you how to apply the standards in the WebCMS.

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Web Standard: Archive

Definition

The archive consists of web content that is:

- No longer maintained and is separated from the active content collection but kept available in public access for historic or reference purposes and
- Distinguished by a banner (HTML page) or watermark (PDF).
- Located and searchable only at archive.epa.gov.

Content Requirements

- Archive content has to be identified by the content owner. [View the description of, and instructions for, the archiving process](#).
- EPA staff should link to the homepage of the Archive from WebCMS content pages using EPA standard "Search the EPA Archive" (a button in the WYSIWYG editor). The link will be to http://archive.epa.gov only.
- Archived Web content is NOT:
    - part of a resource directory, microsite or the searchable collection in the WebCMS
    - actively managed/maintained/modified or updated or
    - tagged with new metadata
    - directly linked to unless it is the class of excepted content (press releases)
        - You may link directly to specific files in these subdirectories of the archive:
            - [January 1-19, 2017 news releases](#)
            - [2016 news releases](#)
            - [2015 news releases](#)
            - [1994 - 2014 news releases](#)

Content that May *Not* be Archived

- Content transformed to One EPA Web topics - the old site should be **deleted**
- NEPIS/NSCEP content
- Superfund content that is in or belongs in the Superfund Enterprise Management System (SDMS/SEMS)
- Content belonging to other Agencies including GPO (Federal Register) or regulations.gov
- Copyrighted material
- Content that should be retired and removed from the EPA web collection because it is obsolete and does not reflect current EPA policy, decisions, etc. Use ROT review to decide if content should be archived or deleted.

Related Information

- [Directions on how to Archive Content from EPA's Website (www.epa.gov)](#)
- [Procedure: Web Content Types and Review](#)
- **Note:** EPA's web archive is not a records management system. Content owners must determine their own [record management requirements](#).

About Archiving

- Primary content for primary audiences does not belong in the archive. It belongs in the WebCMS.
- Many file types can be archived: HTML, PDF, WMV, CSV and others.
- EPA's [Procedure: Web Content Types and Review](#) requires that content owners review the content they have archived.
  - Content can become ROT and be removed by a request to OEI.
  - Content can be transformed into One EPA web content
    - Duplicate content should be removed from the archive when new EPA content is published.
  - Content can be determined to be useful and remain in the archive collection.
- Once in the archive, content cannot be removed.
- Many links are broken in archived content. The archive home page notifies customers that links are broken.
  - OEI cannot provide any automated link-adjustments.
  - OEI will not help with link management or maintenance
  - Content owners can purchase Working Capital Fund (WCF) TZ services to repair broken links if they desire.

How People Will Find Archive Content

- There is a link on the EPA regular search results.
- There is an option on the advanced search page.

About this Standard

Original effective date: 02/11/2015
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Audio files Use MP3

Definitions:

- Audio files play sound. There are no images.
- Max file size limit is 1000MB.

Content Requirements:

- Audio files are MP3.
- Will need a transcript for the information in the MP3 to meet 508 requirements.
- Audio files should be technology agnostic and played by the browser. This means you should not use proprietary products such as AIFF or WAV.
- You may only use file types for applications which EPA has Terms of Service agreements. Individuals may not accept most standard on-line terms of service agreements. Terms of Service is negotiated at the Agency or federal level.

How to:

- Basic page contains the transcript and links to audiofile or
- Document page that links to audiofile and transcript is a PDF

Examples:

Public Service Announcements

About this Standard

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Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Basic Information Page

Definition

Related Information

- [One EPA Web](#)
- [Microsite Guidance](#)
- [Resource Directory Guidance](#)
- [Web Standards: Critical Terms](#)

A simple overview of a topic and answers questions like:

- What's the issue?
- Why should people care?
- What is EPA doing about it? (e.g., regulations, partnerships, outreach, enforcement, research, grants)
- What can you (as a person or as an organization) do about it?

Content requirements

- Name this page whatever you want using these examples Learn About [topic], Basic Information about [Topic], What is [Topic] etc.
- This type of page should be used in each web area, including those that address technical topics.

This page is:

- Written at a level understandable by an 8th grader
- Linked to from the home page of the web area
- Linked to in left sidebar on microsites

Example

About this Standard

Original effective date: 03/28/2009

Last approved on: 06/14/2017

Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Boxes

Definition

Boxes highlight specific web content.

Content Requirements

- Use the boxes found in the EPA stylesheet. They are part of the look and feel and are described fully at: Style Guide: Boxes

Box Styles

- **Alert Box:** Emergency alert or other important information. The title must convey the specific alert or emergency. Use on any page.
- **Blog Box:** used to pull in EPA blog content. Used primarily on homepages.
- **Highlight Box:** to highlight one set of related, critical or featured content
- **Image box (with or without a caption):** sets the image apart from content and floats it left or right
- **Multi-purpose box:** For content that doesn't meet any of the other definitions.
- **News Box:** Lists of recent events, news items, or upcoming calendar events.
- **No Style Box:** For microsite homepages
- **Pull Quote Box:** To quote text from the content of the page. You can also use the pull quote author style for the author.
- **Quiz Box:** uses the simple box. Used primarily on homepages.
- **Related Information Box:** lists of related information, that is not critical or featured content.
  - On Homepages:
    - Use for Related Topics box on resource directory homepage, if used.
    - No images because this is for less important content.
  - On Basic pages: can use an image if needed
- **RSS Feed Box:** used to pull RSS feeds from EPA newsroom. If 3rd party content is used, you are responsible for 3rd party content. Used primarily on homepages.
- **Simple Box:** Has a title or uses an image as a header does not have colored background heading.
- **Special One Item Box:** Contains one link to one featured event or content feature.

Example

See: Style Guide: Boxes

About this Standard

Original effective date: 03/22/2009
Last approved on: 01/10/2018
Web Council review by: 01/10/2021 (or earlier if deemed necessary)

Web Standard: Contact Us Page and Links

Definitions

The Contact Us link appears twice on each EPA page: at the top and in the footer. It links to the web area Contact Us page, which provides information about how to contact EPA staff responsible for the web area content.

When a web area is created in the DWCMS, a Contact Us form is also created. This form should be edited to add additional information.

Content Requirements

- Title of page should be Contact Us About (Topic name).
- Each Web area must provide a page with contact information specific to that area.
- Contact us links are required at the top and footer of every EPA Web page. Both links must point to the same Contact Us page.
  - The footer reads: "Contact Us to ask a question, provide feedback or report a problem"
- Contact Us pages must include the following ways of contacting the web area's owner:
  - mailing address
  - phone number (Recommended but not required)
  - online form for sending questions or comments
- Contact page must also have the report a violations badge, link, and text. If you would like an exemption, contact Christine Dibble.
- If you use the Enterprise Customer Service Solution (aka the online FAQ system), you can link to it from your Contact Us page.
- Contact information may refer to a group or hotline rather than a specific person. However, all email addresses provided must be epa.gov.
- A er submitting a form, the user must receive a follow up page thanking them for writing. This thank you page is system-generated, but you can modify the thank you text.
- Contact information must be validated every 90 days.
- "Regular" web forms are treated separately.

Related Content

- Web Standard: Web Forms
- Style Guide: Forms

Examples

New Bedford Harbor: Contact Us

About this Standard

Original effective date: 03/22/2002
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Email Address Links

Content Requirements

When providing email addresses, link from the person's name, not the email address. Show the email address as unlinked text in parentheses following the name. Screen readers may skim a file by reading only headers and links, and "mail-to" links out of context may not make sense.

Examples

Yes: Contact: [Hermione Balderdash](#) (balderdash.hermione@epa.gov)

Yes: Email [Rupert Kerfuffle](#) (kerfuffle.rupert@epa.gov) for more information.

No: Mary Cuppacoffee ([cuppacoffee.mary@epa.gov](#)) can provide more information. *[Why no? because email address is linked rather than name.]*

No: Contact [Mary Cuppacoffee](#) with questions. *[Why no? Name is provided, but email address is not included.]*

No: Send email to [baggadoughnuts.joe@epa.gov](#). *[Why no? Link to email address alone and name is not provided.]*

No: [Send email](#) to Joe Baggadoughnuts. *[Why no? Link text does not provide name or context for email to be sent.]*

Exceptions

Where the context is obvious from the headers and the email address is provided along with full contact information, it is acceptable to link to an email address.

For example, one could link to an email address when:

1. the email address is the first link a er a "Contacts" header. Example:

Contacts

For additional information about EPA's programs with Grape Jelly, contact:

John Q Public – Grape Jelly Program Manager
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
Email: [public.johnq@epa.gov](#)
(202) 564-0000

But not:

> ### Contacts
>
> For additional information about EPA's programs with Grape Jelly, contact:
>
> John Q Public – [Grape Jelly](#) Program Manager
> [U.S. Environmental Protection Agency](#)
> 1200 Pennsylvania Ave., NW
> Washington, DC 20460
> Email: public.johnq@epa.gov
> (202) 564-0000

[Why no? because the link is not immediately following the Contacts header.]

2. the individual's name is in a header immediately preceding the email address. Example:

> **John Q Public**
> Email: public.johnq@epa.gov
> (202) 564-0000

About this Standard

Original effective date: 09/28/2005
Last approved on: 10/08/2014
Web Council review by: 01/15/2018 (or earlier if deemed necessary by the Web Council)

Web Standards: Look and Feel Template

Definitions

The standard template is the look and feel of the top and bottom of each EPA web page. It is owned by OWC and OEI. The WebCMS produces this look and feel automatically.

Content Requirements

- Do not modify the standard template produced by the WebCMS.
- All applications should use the standalone template
  - Applications should be reviewed by OWC just like all web content. It's better to work with OWC from the beginning.
  - When using the standalone template for an application, some exceptions may be made as determined by the One EPA Web Team and must first be approved, such as: Alternate navigation (no left sidebar), local styles, tables, images, complex application layouts, and responsiveness.
  - Applications should follow web best practice and meet Section 508 requirements just like all web content.

Related Information

- [Procedure: Complying with EPA.gov "Look and Feel"](#)
- [One EPA Microsite Guidance](#)
- [One EPA Resource Directory Guidance](#)
- [Applications and the One EPA Web Template](#)

About this Standard

Original effective date: 2/11/2015
Last approved on: 6/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Frames

Definitions

Frames allow you to show more than one document within a single page.

Content Requirements

- Do not use frames. Instead, use iframes, an element provided in the Drupal Web Content Management System WYSIWYG editor

About this Standard

Original effective date: 03/22/2002
Last approved on: 01/10/2018
Web Council review by: 01/10/2021 (or earlier if deemed necessary by the Web Council)

Related Information

[Style Guide: Iframes](#)

Web Standard: Glossaries

Definitions

A glossary is a list of terms and their associated definitions, usually related to a particular program or subject. In order to foster understanding, numerous EPA Programs make glossaries available on their web pages.

Terminology Services (TS) is a centralized approach for maintenance and display of glossaries at EPA.

Content Requirements

Please note: this standard does not apply to glossaries within or attached to a particular document, but rather stand-alone, web-based Program glossaries.

- Glossaries must be managed in Terminology Services including glossaries that currently exist only on a web page. They may not be managed on a static HTML page, nor in a document attached to a web page (e.g. pdf).
  - **Note:** most EPA Program glossaries have already been loaded into Terminology Services.
- For guidance on how to manage a glossary in Terminology Services, please refer to the Glossary Management GuideYou may need a PDF reader to view some of the files on this page. See EPA's About PDF page to learn more.
- For more information on managing your glossary in Terminology Services, including best practices for creating and maintaining glossaries, please see: Terminology Services References
- Provide a link from your web page to your glossary within Terminology Services.
- Review/update your glossary at least once a year. See: Glossary Management GuideYou may need a PDF reader to view some of the files on this page. See EPA's About PDF page to learn more.
- Before creating a new glossary or revising an existing one, you may want to review the Terminology Services repository to determine if existing content can be used in creating or standardizing your glossary.

Examples

Exchange Network

About this Standard

Effective date: 02/08/2012
Date approved: 09/12/2012
Web Council review by: 01/15/2018 (or earlier if deemed necessary by the Web Council)

Web Standard: Graphics and Images

Definitions

- **_A graphic_** is an image, including photos, logos, icons, static maps, infographics, diagrams, charts (including bar charts, pie charts, flow charts and organizational charts), graphs and other images. For the purposes of this standard, graphics do not include videos.
- **_A decorative photo_** adds visual appeal to the page, but does not expand visitors' understanding of the content. A photo without a caption is assumed to be a decorative photo.
- **_An explanatory photo_** provides information, navigation, or visual organization, and serves an obvious purpose. It expands visitors' understanding of the content covered by the page.
- **_A banner_** is an image located at the top of a web page that spans more than half the width of the page.

Application

The standards set forth below apply to all graphics on sites managed by EPA staff. These include graphics:

- on legacy sites,
- in web applications, and
- on pages in One EPA Web sites.

Graphics on One EPA Web home/hub pages must in addition follow the process and standards set forth in the [Image Guidance](#). The requirements in this standard do not apply to videos (see [Web Standard: Videos](#)).

Content Requirements

Requirements for All Graphics

- Avoid using graphics to display text. If text is provided in a graphic, and that text is not also included in the content, include a text alternative for the content of the graphic.
- Do not infringe on copyrights, trademarks, and other intellectual property rights.
- Do not stretch the image out of proportion.
- Do not post banners on any page.
  - Exceptions:
    - [EPA home page](#)
    - Microsite home pages and pages in applications designed to look like microsite home pages, for example the [Science Inventory home page](#)
    - Specific exceptions granted by the Office of Web Communications
    - Pages within the "Learn the Issues" web area, for example the [Learn about Emergencies page](#)

- Regional "home" pages within the About EPA site, for example the [Region 4 home page](#)

- Pages intended to mimic the front page of a printed newsletter, for example the [September-October 2018 issue of the *EPA in the Pacific Southwest* newsletter](#)

Requirements for Decorative Photos

- Relevance: Photos intended for decorative purposes should be related to the surrounding content
- Section 508: Use empty alternative text (alt="").
- Formats: Use only GIF (.gif), JPEG (.jpg, .jpeg), or PNG (.png) formats.
- Dimensions: up to 325 pixels wide, and up to 325 pixels high.
- File size: No more than 50K.
- Page location: Generally on the right side, with text wrapped around it.
  - Note: do not use multiple decorative photos on a page, associated with headings and links, so that the page, or part of it, resembles a Resource Directory home page.
- Example: [image on Health and Water Research page](#)

Requirements for Explanatory Photos

- Section 508: All explanatory photos must have a caption to explain how the photo subject relates to, or illustrates, the content of the page. The caption will provide the context for accessibility in lieu of the alt text. With respect to alt text for these images,
  - if the caption does not explain what sighted visitors can see in the photo, add alt text
  - if the caption explains what is being seen, do not add alt text. Instead, use empty alternative text (alt="").
- Formats: Use only GIF (.gif), JPEG (.jpg, .jpeg), or PNG (.png) formats.
- Dimensions: Up to 400 pixels wide, and up to 400 pixels high, unless a larger size is necessary to see vital detail in the photo. If a larger size is needed to see detail, then add a link:
  - below the graphic
  - to another page, or to a colorbox, containing that graphic
  - with link text similar to "View a larger version of this image" .
- File size: Recommend no more than 50K.
- Examples:
  - [images on Nutrient Pollution: The Problem page](#)
  - [image on Introduction to Bed Bugs page](#)
  - [image on Nutrients Management Research page](#)

Requirements for Graphics other than Photos

- Relevance: Maps, diagrams, infographics, charts (including bar charts, pie charts, flow charts and organizational charts), and graphs must expand visitors' understanding of the surrounding web content or represent the topic to which they refer.
- Section 508: Contact the EPA 508 coordinator for suggestions on how to make your map, diagram or flow chart 508-compliant.

- Dimensions: Generally, up to 600 pixels wide, and up to 600 pixels high. If a larger size is needed to see detail, then add a link:
    - below the graphic
    - to another page, or to a colorbox, containing that graphic
    - with link text similar to "View a larger version of this image" .
- File size: Recommend no more than 50K.
- Page location: Le , centered or right. Depending on the size and placement, text does not necessarily need to wrap around it.
- Examples:
    - Maps:
        - [About Deer Lake AOC map](#)
        - [Fenceline Air Monitoring at Pet Coke Storage Facilities map](#)
        - [New Bedford Harbor cleanup map](#)
    - Diagram: [How are plants and animals exposed to contaminants?](#)

Related Information

- [Style Guide: Media](#)
- [Web Standard: Graphic Logos](#)
- [Image Guidance](#) (applies to images on One EPA Web site home and hub pages)
- [Posting Copyrighted Works on EPA's Website](#)
- [Photos to use on EPA Web sites](#) (intranet)

About this Standard

Original effective date: 10/08/2014
Last approved on: 10/08/2014
Web Council review by: 10/08/2018 (or earlier if deemed necessary by the Web Council)

Web Standard: Logos

Content Requirements

OPA discourages the creation of program logos because they dilute the EPA brand. If you must have one, your Web Council member and the Office of Public Affairs (OPA) must approve all program logos in advance. Contact Jini Ryan (ryan.jini@epa.gov), Office of Public Affairs: 202-564-0175.

About this Standard:

Original effective date: 09/28/2005
Last approved on: 02/14/2018
Web Council review by: 02/14/2021 (or earlier if deemed necessary by the Web Council)

Web Standard: Headings

Definitions

Headings are the headlines used on a page. Headings are used in descending levels of size and emphasis, enabling clear and precise content organization. They create scannable and easy-to-use pages for both disabled and able-bodied users.

Content Requirements

- The page title of all EPA pages is an <h1> element. Only the page title can be <h1>.
- Use <h2> to <h6> in the proper descending order.
  - These headings should be used as you would an outline structure
  - Any skipping of levels breaks the flow of the page for both disabled and able-bodied users. Choosing to use an heading tags out of order, for purely visual appeal, renders your content less useful and less accessible.
- Headings should use title case (initial upper case letters) for major words.
- These are now headers with background colors (<h2> through <h6>) in the style sheet.
  - Apply consistently to one header size per page. For example, if one <h3> is highlighted, all <h3>s, and only <h3>s, should be highlighted.
  - Either all <h3> or all <h4>, but not both.

Example:

See: [Style Guide: Headings](#)

About this Standard

Original effective date: 09/12/2012
Last approved on: 01/10/2018
Web Council review by: 01/10/2021 (or earlier if deemed necessary by the Web Council)
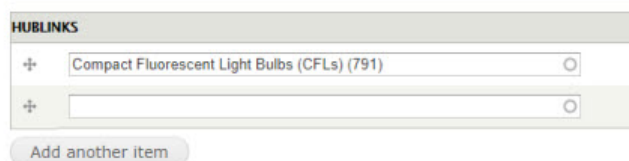
Web Standard: Hub Links

Definition

Hub links take visitors to the home/hub pages of microsites and resource directories on related topics. They appear in the upper left corner of basic pages created within a resource directory ('spoke pages'), after the phrase "Related Topics:". Resource directories do not have any other secondary navigation menus, like breadcrumbs or sidebar links.

<table>
<tr><td>Related Information</td></tr>
<tr><td>• One EPA Web</td></tr>
</table>

- The first hub link is generated by the Web CMS.
- If another resource directory or microsite links to the same spoke page, another hub link can be manually added to that resource directory or microsite.
- There is no limit on the number of hub links you are permitted to add.

To build a hub link, go into the edit view for a page and scroll halfway to the HUBLINKS section:

Begin to fill in the name of the second resource directory or microsite that this page should link to. The system may generate a drop-down menu of choices you can select from. Select the web area you have in mind. You can rearrange which resource directory or microsite is left-most and which is right-most by holding your mouse down on the arrow-cross icon for that link and dragging it to the location you prefer. Save your edit and close.

Example

Hub links on a basic page.

About this Standard

Original effective date: 09/12/2012
Date last reviewed and approved: 04/11/2018
Next Web Council review by: 04/11/2021 (or earlier if deemed necessary by the Web Council).

Web Standard: Javascript

Modern JavaScript is a powerful language, and we can do so much with it these days, from simple content and UI updates to fully-fledged 2D and 3D games. At the same time, you need to ensure that your page and script are accessible.

A web page containing JavaScript will typically be fully accessible if the functionality of the script is device independent (does not require only a mouse or only a keyboard) and the information (content) is available to assistive technologies. Unfortunately, there is no easy fix that can be applied to solve all accessibility problems associated with JavaScript. The only way to ensure JavaScript accessibility is by evaluating each pages that utilizes scripting and devising a unique solution to any accessibility problem found.

Definitions

JavaScript (JS) is a client-side scripting language. You can use it to validate forms, detect user actions (such as individual keystrokes), or retrieve data from the server without interfering with the display or behavior of the open web page. JavaScript can also power entire applications, like Gmail.

Accessibility: It is a common misconception that people with disabilities don't have or 'do' JavaScript, and thus, that it's acceptable to have inaccessible scripted interfaces, so long as it is accessible with JavaScript disabled. A [2012 survey by WebAIM of screen reader users found that 98.6% of respondents had JavaScript enabled](#) [EXIT](#). Accessibility guidelines also require scripted interfaces to be accessible. WCAG 2.0 and all other modern guidelines allow you to require JavaScript, but the scripted content or interactions must be compliant with the guidelines.

EPA uses **jQuery** as its main JS library. This library "sits" on top of JS and makes common tasks easier. When you write in jQuery, you're still writing JS, but what used to be 50 lines may now be one or two. All Drupal WebCMS content include the master jQuery file. You need not include it separately.

We [provide a standard suite of JS files for everyone at the Agency to use](#). Linking to the EPA master JS files will improve your site performance, as users will cache a copy of the files. All JS, in content managed by the Drupal WebCMS, is output at the bottom of the HTML, just before the closing </body>tag. Placing scripts here speeds up epa.gov for our readers. Area webmasters in the Drupal WebCMS can write JS, per page, as needed.

Content Requirements

- Do not use too much JavaScript.
  - Sometimes you'll see a website where everything has been done with JS: the HTML has been generated by JS, the CSS styling has been generated by JS, etc. This has all kinds of accessibility and other issues associated with it, so it is not advised.

- You should not use JS to create or modify styles for your content.
- All JS must go into the Page JavaScript field in Drupal WebCMS JS in any other field is stripped out.
  - JS for your application can go anywhere in the HTML we recommend you output it at the bottom of the page or that you defer its loading.

- Web pages should not be dependent on JavaScript to work.
  - Functions first check to see if an object is available. If not, then fail silently
  - HTML and JavaScript are separated: no inline event handlers
  - With JavaScript off, nothing happens thus, <noscript> is unnecessary

- If you offer advanced functionality and your pages cannot work the same way without JS:
  - Ensure that you account for users without JavaScript.
    - While this does not necessarily mean that all functionality must work without scripting (though this would clearly be optimal), if it does not work without scripting, you must avoid a confusing or non-functional presentation that may appear to function, but does not because of lack of JavaScript support.

  - At a minimum, provide text equivalents.
  - Provide a phone number or email address to get help.

About this Standard

Effective date September 28, 2005
Date approved July 12, 2017
Web Council review by June 2020 (or earlier if deemed necessary by the Web Council)

Web Standard: JavaScript Files and Libraries Review Process

EPA has established this JavaScript (JS) review process and will maintain strict control of JS use in the One EPA Web environment. Most potential JS files and libraries will undergo review prior to being used in the One EPA Web environment. Third-party JS, with some exceptions, is not allowed on www.epa.gov.

There are four classes of JavaScript files that can be found in the Drupal WebCMS:

1. library/framework scripts, like jQuery
2. component/plugin scripts that require a library, like jQuery UI, jQuery Colorbox
3. common application-level scripts that are shared among multiple pages and might require the above
4. JavaScript embedded on a single page that might require the above

While JavaScript files and libraries can be easily written and deployed on an EPA server, larger issues are security, redundancy, and the need for caching.

- An improperly-written JavaScript file can introduce security vulnerabilities which hackers can exploit to cause damage to the EPA Public Access servers.
- We want to reduce the number of duplicate JS files on the Drupal WebCMS server. (Duplicate JS files occur when multiple versions of the same JavaScript file(s) are uploaded.)
- We want to reduce duplicate functionality. As an example, there are dozens of lightbox-style scripts that do the same thing in a different way.

⚠ Third Party JavaScript

Like plaintext HTTP, the ability to pull in arbitrary third party service JavaScript that has full control over session privacy/integrity, without any meaningful containment mechanisms, is a legacy pattern from a less security-aware time in web browser development. Such libraries and files represent a significant security risk. Unfortunately, there's not a simple technical or policy solution, other than prohibiting them completely.

Therefore, **EPA prohibits the practice of using third-party JavaScript libraries**. Exceptions include Google Analytics, CrazyEgg, Foresee, and other analytics so ware.

OEI maintains a set of JavaScript libraries that are kept up-to-date for your use. Well-known third-party libraries may be added through the process outlined on this page.

Related JavaScript Topics

JavaScript: Colorbox

JavaScript: Creating a Quiz Example

JavaScript: Data Visualizations

JavaScript: Datatables

Javascript: Dropdown Navigation

JavaScript: EPA Blog Feeds

JavaScript: Federal Register Feeds

JavaScript: Files and Libraries

JavaScript: Leaflet

JavaScript: Responsive Image Maps

- We want to take advantage of caching—
many JS files and libraries are large files, and if each of us link to and use the same files, we reduce our bandwidth and improve overall visitor experience.

For these reasons, OEI maintains control over JS files on the WebCMS server. OEI will be reviewing all uses of JavaScript to ensure appropriate coding style and usage. Approved JavaScript files and libraries are added to the WebCMS server, and you can link to these approved JavaScript files and libraries from your EPA web pages.

The Review Process

OEI cannot help you troubleshoot your JS code. If you're using the included JS, please see the Web Style Guide for examples and how-tos. If you're writing your own code or submitting a third-party library, you must know what you're doing. It is your responsibility to ensure that no conflicts exist between your code and the existing JavaScript already in use for the One EPA template and the Drupal WebCMS application.

All JavaScript files not already in use and approved must be reviewed, and your office will be responsible to fund that review via a Working Capital Fund service agreement (you will need a registration code). It should not take more than 10 hours per submission, but you should allow for at least five days for the scanning process (there's a queue). As scripts are submitted, we will monitor them for candidates to make generally available as part of our documented / semi-supported library. You, the original submitter, will remain primarily responsible, and OEI will serve as intelligent librarians, not code-maintainers.

Highly-regarded and well maintained third-party libraries may go through a shorter review process and be added to the Drupal WebCMS servers by OEI.

Contact the TZ Service Manager in OEI to set up a TZ account to pay for the JavaScript code review under Working Capital Fund Services. OEI will work with CSRA to give you a cost estimate and a description of what they will do.

- Criteria for Approval of JavaScript Files and Libraries
- Lifecycle for JavaScript Files and Libraries
  1. Development
     - General Coding Rules

  2. Security Checklist and Application Deployment
  3. Updating a JavaScript File or Library
  4. Retiring/Reactivating a JavaScript File or Library

- Using Standard and Certified JS Files on Production Web Servers
- Using JavaScript for Dynamic (Small) Applications

Criteria for Approval

Any content editor developing and maintaining JavaScript files (i.e., those developed for specific use and from outside NCC) must certify that the scripts are designed and implemented according to established guidelines and security standards.

- EPA JavaScript Web Standard
  - JavaScript is ideally used to enhance pages and user experience. Pages should be able to display all of the real content and media when JavaScript is disabled.
  - The use of JavaScript is discouraged when server-side coding can accomplish the same end goal.
  - JavaScript should not be used to query complex datasets requiring numerous data files.
  - JavaScript should not be used to perform complex calculations.

- OEI will approve the following:
  - dynamic data presentation, such as from data files: CSV, JSON, XML
  - database calls to an EPA data source via AJAX/jquery
  - interactivity, including forms and form results.

- OEI will disapprove the following:
  - **Code that does not pass the JSHint (or JSLint) or EPA scanning processes**
  - Code that is not properly licensed for use by EPA
  - Code that changes the EPA One Web look-and-feel (local styles are not allowed)
    - JavaScript that breaks the responsive design template
    - JavaScript that injects HTML onto a page with contain local styles

  - Anything already part of the standard libraries or that can be achieved using JS files and libraries already approved
  - Any packed/minified JavaScript provided for to review.

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Lifecycle of a JavaScript File or Library

This section outlines the life cycle of a JavaScript file or library in the Drupal WebCMS environment.

Stage 1. Development

The Application owner begins development and testing of JS. The EPA specifically provides the Drupal WebCMS Sandbox server for this purpose. The sandbox server has the same code as the production environment, decreasing the testing and debugging time. There is no cost to step up a user account on the sandbox. If you have an account on the production server, you also have an account on the sandbox.

During development the JavaScript coder should review the security issues as outlined in the JavaScript Program Security Checklist and Deployment Request Form. JS files will be expected to conform to these standards. Any script not in compliance with these standards will be disapproved.

You will first provide the JS files to OEI so that we can load them into the sandbox. A list of dependencies must be provided to OEI by the developer so that the JavaScript can be loaded in the correct order on the page. Once the files are available, you will build your page and code.

General Coding Rules

The long-term value of so ware is in direct proportion to the quality of the codebase. Over its lifetime, a program will be handled by many pairs of hands and eyes. If code is able to clearly communicate its structure and characteristics, it is less likely that it will break when modified in the never-too-distant future.

Code conventions can help in reducing the brittleness of programs. To the extent possible, follow Douglas Crockford's coding standards for JavaScript.EXIT

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Stage 2. Security Checklist and Deployment

Once development and testing has concluded, the JS owner submits the JavaScript Program Security Checklist and Deployment Request Form to WebCMS Support (web_cms_support@epa.gov). No work can take place until you have a registration id/charge code set up for vetting submitted code.

Submitted JavaScript files will be vetted by our contractors--they will scan your code and page. The code owner (you) will pay for this vetting, which should not take more than 10 hours of work per code submission. (Note that this means you pay for every submission, so it's to your benefit to ensure that the submitted code works.) This review process can take up to five days (there's a queue).

If the code passes review:
The JS files and libraries will be placed into the production repository (our revision control system). You will no longer have write access to the code. All changes to code will be recorded. Rollbacks to previous versions will be possible. You can request a rollback by emailing WebCMS Support (web_cms_support@epa.gov).

If the code fails review:
You will be notified with a copy of the review along with recommendations. The JavaScript then can be further developed until the security requirements are met. JavaScript that does not meet security and coding standards will not approved.

If a JavaScript fails on the production server:
If a JavaScript file or library fails in the production environment, OEI can provide only limited support (e.g., assist

Stage 3. Updating a JavaScript File or Library

As OEI will manage the revision control system, you will no longer have write access to your production JS file or library. You will modify your JS on the Sandbox server and, when testing is complete, make a JS Update Request by contacting us.

A er the request has been received and confirmed with you, OEI will run a diff on the two scripts. New code will be reviewed and tested. If the JavaScript passes review, it will be certified and updated as noted above. If it does not pass review, you will be notified as above.

If necessary, you can request that current code be rolled back to a previous version. To rollback, make a JS Update Request. One caveat: if the code is out of date, it will be subject to a new review before it is restored.

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## Stage 4. Retiring/Reactivating a JS File or Library

If a JavaScript is no longer required, you can retire it by submitting a JS Update Request.

The script will be retired from active use, archived, and available for reactivation. To reactivate it, submit a JS Update Request. One caveat: if the code is out of date, it will be subject to a new review before it is restored.

Please note that OEI will review JS usage periodically. If the code has not been used or accessed in the last 60 days, you will be notified. You can then determine if the JS should remain operational or be retired.

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Using JavaScript for Dynamic (Small) Applications
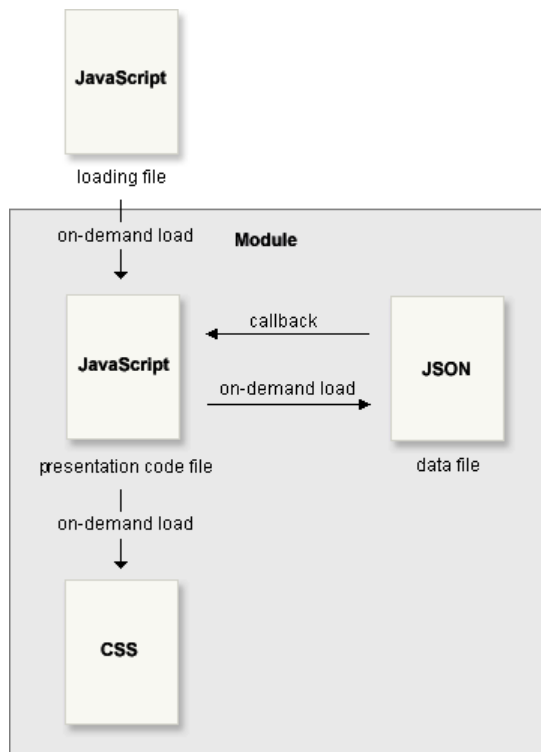
The flow of JS applications

One reason we're opening up JS for our content editors is captured in the image to the right, which shows an example of using JS to read and output data from an external data source (whether another EPA server or an uploaded data file).

DataTables or Highcharts, or other scripts, will help you display this external file-based data.

Examples include the Superfund Where you Live dataset (powered by Datatables and a JSON file), Region 1's Charles River Buoy dataset (powered by Highcharts and a CSV file).

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Web Standard: Local Styles

Local styles are created outside of the standard EPA style sheet. These are not allowed. EPA's official branding is managed by the Office of Public Affairs. One EPA Web uses only EPA standard styles found in the style guide.

See: Style Guide

About this Standard

Original effective date: 09/12/2012
Last approved on: 01/10/2018
Web Council review by: 01/10/2021(or earlier if deemed necessary by the Web Council)

Web Standard: Maps

Definitions

Maps may be:

- Interactive
  - EPA's [GeoPlatform](#) is the standard way to create interactive maps.
    - Do not use Google maps or other commercial maps. We have no licensing agreement for Google Maps.
    - More information:
      [EPA GeoResources page](#) (map development) `INTRANET`
      [Web Style Guide](#) (web page development)
    - [Adding EPA Geoplatform Maps to Pages](#)

  - Use of Leaflet
    - Leaflet is an open-source and lightweight JavaScript library for mobile friendly interactive maps. This library is aimed at simple maps. See the [Leaflet JavaScript Library page](#) for more information on usage and benefits.

- Static map image or image with clickable image map
  - Static map image that could link to other web content.
  - U.S. map of states or EPA regions will use the standard [U.S. National Maps](#) (formerly called 'Where You Live')
  - All [clickable maps must be responsive](#).

Content requirements

- Maps will have:
  - A title, that includes the word "map", located above the map in header tag <h2> – <h4>.
  - The map itself
  - Caption text, if needed for clarity, clickable to additional information (preferred)
  - U.S. map of states or regions will use the standard U.S. National Maps (formerly called 'Where You Live')

About this Standard

Original effective date: 09/12/2012
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: New Icon

Definition

A "New!" icon is a small text-based "icon" that indicates a piece of content is new.

Content requirements

Using a "New!" icon is optional. If you use one:

- Limit use of "New" icons on a page.
- Do not write text that redundantly suggests newness, e.g., "EPA today initiated ..."
  - Your text must be timeless.

- Note: the "New" icon will not appear on browsers that do not have JavaScript enabled. Do not provide a HTML alternate this is not critical content.

The "New!" "icon" will remain visible for 30 days from the date you used.

- To make the icon appear for fewer days, just back-date accordingly.
- You cannot make it appear for more than 30 days.

Example:

NEW How the new icon appears on EPA.gov.

About this Standard

Original effective date: 09/28/2005
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: On this Page/Table of Contents

Definition

"On this Page" is a table of contents, or a list of links, most o en found at the top of the page, that links to information found further down the page.

Content Requirement

- Use a table of contents on pages that contain more than one main section, and that are more than two screenfuls long.
  - As an introduction, before the contents list, write a short blurb for the page (one sentence may be sufficient) unless the information presented on the page is completely intuitive.
  - A er the introduction, create a bulleted table of contents with links to each heading. If the page presents questions and answers, the links will be to the questions.

- Capitalize only the first word of the anchored links.
- If closely related information on this topic is available on other pages, a second "On Other Pages" bulleted table of contents may also be displayed (see Example 2 below).
- A horizontal rule is added a er the table of contents.

Example 1

Recycling and Disposal of CFLs and
that Contain Mercury

EPA recommends that consumers take advantage of available local options for recycling CFLs, fluorescent bulbs and other bulbs that contain mercury, and all other household hazardous wastes, rather than disposing of them in regular household trash.

View information about CFL recycling and disposal requirements specifically for businesses.

On this page:
- Why is recycling CFLs important?
- How and where can I recycle CFLs?
- What if I can't recycle?

Why is Recycling CFLs Important?

Example 2

PDF Files

On this page:
- Purpose of the PDF format
- Installing Adobe Reader
- Downloading large Adobe PDF files
- Printing Adobe PDF files
- Accessibility of Adobe PDF files
- Adobe trademarks and copyright
- EPA disclaimer about this information

On other pages:
- How to search for words or phrases in a PDF document

Purpose of the PDF Format

About this Standard

Original effective date: 09/12/2012
Date last reviewed and approved: 04/11/2018
Next Web Council review by: 04/11/2021 (or earlier if deemed necessary by the Web Council).

Web Standard: Page Not Found (404 Error)

Definition

A page that notifies a visitor they have found a broken link.

Content Requirements

- In the WebCMS, there will be a single 404 error page for the Agency.
- Applications should have a 404 error page.
  - Applications should include on their page not found content:
    - Page title that shows that a person is on a Page not Found page.
    - A way to find information in the application (for example, a search box for the application).
    - A link to the application homepage or application search page.
    - A link to the EPA Homepage in the body of the page.
    - You can add more information if you think it helps the customers find information.

Example

http://www.epa.gov/compliance/404demo

About this Standard

Original effective date: 01/01/2004
Last approved on: 6/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: PDF Links

Definitions

- A PDF is a document in Adobe Portable Document Format (PDF) the filename extension is .pdf
- The Drupal WebCMS adds the PDF link standard requirements (PDF disclaimer, PDF in the link, file size and number of pages a er the link) automatically on the document page.
- The EPA PDF linking standard applies to all PDF links including PDF links leaving the EPA.gov site.

Content Requirements

- When linking to PDFs, follow this format: <link>PDF Title (PDF)</link> (xx pp, yy K, About PDF)
- Provide a link to EPA's "About PDF" page (http://www.epa.gov/home/pdf-files) on any Web page that links to PDFs. There are two ways to do this:
  - Use the PDF disclaimer box:
    - at the top of a page that includes many PDFs, right before a paragraph or list of PDFs, or
    - immediately before the first reference to a PDF

  - Use the inline disclaimer when the long version is problematic, or where you have only a few PDFs linked
    - Format: inline disclaimer: <link>PDF Title (PDF)</link> (xx pp, yy K, About PDF)

- The "About PDF" link is only required once per page.
- Include the title of the document and the acronym "PDF" in parentheses in the link text. Make sure it's a good descriptive title for the PDF you're linking to
- A er the link, show the PDF file information in parentheses, listing the number of pages and file size of the PDF as unlinked text, separated by commas. (xx pp, yy K, About PDF)
  - For the number of pages, use "1 pg" for a single page. For multiple pages, use "XX pp" with a space between the number and "pp".
  - For file size, use "K" for files smaller than 1000 K and "MB" for files larger than 1000 K. For MB, use at most one decimal place. Put a

Section 508

PDFs are required by law to meet Section 508 accessibility requirements. Occasionally, a PDF may not meet those requirements (e.g., too technical, mathematical formulas, maps or other images). In rare cases like this, the PDF can be accompanied by contact information for users in need of accommodation.

- If you are posting a non-accessible (not 508 compliant) PDF and you are not posting the same content in some other accessible format (e.g. HTML or text), provide contact information. (If you include an email

space between the number and "K" or "MB."

- You may code the file information in parentheses to appear in a smaller font by using the File Info disclaimer (class="fileinfo").

- Do not add the file type of PDF, the file size, or the number of pages when linking to a document page. The document page is not a PDF file.

Examples:

- **Correct link to a PDF:** Care For Your Air: A Guide to Indoor Air Quality (PDF) (3 pp, 2 MB, About PDF)
- **Correct link to a document page:** EPA Region 8 Certified Drinking Water Laboratories: Wyoming / Tribal Public Water Systems

About this Standard

Original effective date: 07/12/2006
Last approved on: 07/12/2017
Web Council review by: 07/12/2020 (or earlier if deemed necessary by the Web Council)

address, follow the EPA standard for linking to email addresses.)

- You may provide contact information in the same box or paragraph as the long disclaimer.
- Contact information is a phone number or an email address where a person could get help with a document, primarily for purposes of accessibility.
- Possible contacts include your library, public information center, public affairs office or the person who created the document. Whatever information you provide, the document should be traceable back to the program office which produced it.

Web Standard: PDF - When to Use, Document Metadata, PDF Sections

Definitions

PDF file: a document saved in the Portable Document Format using Adobe Acrobat (or another such PDF creator). Typically, PDF files are opened using Adobe Reader, but other applications can read PDF files.

Internal file metadata: the metadata that's saved with the PDF file itself. Using Adobe Acrobat, you can access this internal file metadata by going to File > Properties or pressing ctrl-d. Using Adobe Reader, you can only view this metadata. This metadata includes title, author, subject, and keywords. Completing file metadata information optimizes search capabilities.

Content Requirements

- Content should be created in HTML or PDF, not both. HTML is preferred for accessibility, especially for documents less than 5 pages.
- When linking to a PDF, follow the PDF Linking Standard.
- EPA, like all federal agencies, is required to meet Section 508 requirements.
  - Make the PDF content accessible and web ready BEFORE posting.

- The internal file metadata is required.
  - To add internal file metadata to the PDF file, follow the metadata directions and complete these fields in the Document Properties description tab:
    - Keywords
    - Subject
    - Author
    - Title

Guidelines for posting large PDF documents

Section 508

PDFs are required by law to meet Section 508 accessibility requirements. Occasionally, a PDF may not meet those requirements (e.g., too technical, mathematical formulas, maps or other images). In rare cases like this, the PDF can be accompanied by contact information for users in need of accommodation.

- If you are posting a non-accessible (not 508 compliant) PDF and you are not posting the same content in some

- There is a 1000 MB file size limit for PDF files in to the WebCMS. It will not load in the system.
- **You are not required to break a large document into smaller sections.**
- If your file is over 50 MB, you should consider the document content and the expected audience and determine if chunking the document might be helpful.
- If a file size is > 50MB these are recommended best practice options:
  - Chunk the document to make it usable or
  - Put up an HTML page that contains the Title, Executive Summary
    - Post the document to an FTP site
    - Add information on how to order the document on DVD or CD.

  - If you do divide a document, then create a title page for each section or add this information as a footer/header, in the PDF document. A title page is helpful if other search engines find your content sections. Include:
    - EPA logo or "U.S. Environmental Protection Agency" spelled out
    - Title of full document
    - Title of chapter/section/appendix or description of what the section (file) contains (e.g., "Final Rule: pages 750-828")
    - EPA publication number of full document, if applicable
    - Date of document (month and year)

  - If you are working in the WebCMS, create a single document page for the "chuncked" document.

You should base your decision on what you or your web team can readily manage.

other accessible format (e.g. HTML or text), provide contact information. (If you include an email address, follow the EPA standard for linking to email addresses.)
- You may provide contact information in the same box or paragraph as the long disclaimer.
- Contact information is a phone number or an email address where a person could get help with a document, primarily for purposes of accessibility.
- Possible contacts include your library, public information center, public affairs office or the person who created the document. Whatever information you provide, the document should be traceable back to the program office which produced it.

About this Standard:

Original effective date: 07/10/2013
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Linking to Related Content via Pop-ups, Overlays, New Browser Tabs/Windows and Same Browser Tabs/Windows

This standard was previously titled "Pop-ups and New Browser Windows."

Definitions

- **Closely related content** is content that is intrinsically connected to a subset of content in the existing window. For example,
  - A definition is closely related to the word being defined
  - A description is closely related to the name of a process or technology
  - An answer key is closely related to a set of quiz questions
  - A larger version of an image is closely related to a smaller version of the same image.
  - A video is closely related to a still image of that video
  - An application is closely related to a description of that application, and to instructions for that application.
  - Location attributes are closely related to the location (point, line or polygon) on a map

- A **pop-up** is a window, smaller than the full screen, intended to supplement the primary browser window.
- An **overlay** is a colorbox, lightbox, or other modal box, a window that requires you to do something in it (including closing it) before you can return to the main window, overlaid on top of the primary browser window.
- **New browser windows** are typically the same size as the original window, and usually have their own stand-alone information.

Content Requirements

- Do not use pop-ups, overlays, new windows or tabs unless the content they display is closely related to the content in the existing window (see the definition of "closely related content" above).
- Include text identifiers. When displaying closely related content, if the content opens in a pop-up, overlay, new window or tab, use text identifiers after or nearby the link to warn your visitors that clicking on the particular link(s) will result in a pop-up, or colorbox, new window or tab opening.
  - Exceptions:
    - Locations on web maps and map applications that, when clicked, result in a pop-up, overlay, or similar feature, do not need to include text identifiers.
    - Text to which the ["Add Definitions" feature](#) is applied does not need to include a text identifier.

- target="_blank" is a bad security practice. If you must force a new tab/window, also include rel="noopener noreferrer" to prevent tab hijacking.

Examples

- Sample text identifiers:
  - "(link will open in a new tab or window)"
  - "Note that all links below open in pop-ups."

- View:
  - How [using the code <a href="URL of closely related content" target="_blank" rel="noopener noreferrer"> works to open a new window or tab](#) (as selected by each visitor in his or her browser preferences). Note that clicking on this example will result in the Web Guide home page opening in a new window or tab.
  - [How colorboxes look](#), using the directions on the [Javascript: Colorbox page](#).
  - What visitors see when the [Add Definitions feature](#) is used for the term "gamma spectroscopy": [gamma spectroscopy](#) (click the link to see).

For overlays, see: [Style Guide: Colorbox](#)

About this Standard

Original effective date: 09/12/2012
Last approved on: 2/10/2016
Web Council review by: 02/10/2019 (or earlier if deemed necessary by the Web Council)

Web Standard: Regulatory Template

Creating an EPA "Rule" or "Regulation"

On this page:

- [Template Elements for "Rule" or "Regulation"](#)
  - [Rule Title](#)
  - [Rule Summary](#)
  - [Rule History](#)
  - [Additional Resources](#)
  - [Compliance](#)
  - [Basic Information [box]](#)

- [Standard Dos and Don'ts for Rule-Related Web Content](#)

> **How To Use the Rulemaking Template**
>
> - [View the page on creating and editing the "regulation" page type](#)

Template Elements for "Rule" or "Regulation" Pages

The following information should be included on your regulation (final rule) web page. This template should be used for any final rule published in the Federal Register (FR), or a part of the Code of Federal Regulations (CFR) that contains several final FR rulemakings. Further instruction about each subheading area and box is listed below. If you choose to follow this template for a rule that is in development but that is not final, or a Notice of Proposed Rulemaking (NPRM), some content areas may not apply or may differ, but should be updated when the proposal is promulgated as a final rule. Items marked with an asterisk [*] are required, but it is recommended that pages include all sections where information is available.

Rule Title*:

It is helpful if you consistently use the same "Rule Title" on this web page, your Federal Register final rule document, and other documents about the rule during its development.

Rule Summary*:

Use this area to briefly state the purpose of the rule. Decide whether you wish to link to either the final rule that was published in the Federal Register or to the CFR section that the rule modifies. Keep in mind that the CFR is updated annually, so linking to a specific section may be dated when the CFR is updated. A suggested word limit for your rule summary section is 150-200 words.

Rule History:

Use this area to include history or background of rule, the rule proposal, etc.

- Where possible, if you are seeking public comment, link to Regulations.gov when posting a Notice of Proposed Rulemaking (NPRM) or similar document that was published in the Federal Register. Each document posted in Regulations.gov has a unique URL within Regulations.gov.

Additional Resources:

Use this area to list resources or to link to fact sheets, guidance documents, implementation tools, outreach materials, etc. This area is flexible to make what you choose of it.

Compliance:

Discuss information that the regulated community can use to aid their compliance efforts.

- Consider identifying the industries or sectors affected, with their NAICS codes, both in your content and your metadata.
- Clearly outline what the regulated community must do to comply with new Rule:
  - what they have to do (compliance) and
  - what happens if they don't (enforcement).

- Provide additional information for partnerships or initiatives for businesses that want to go the extra mile.
- Consult with the OECA workgroup representative from your rulemaking workgroup to develop appropriate content for this area.

Basic Information [box]

The Basic Information box is built up of five components, listed below. If you do not wish to use any of the suggested citations, you may omit it from this box. Hyperlinks to the source data for the first four items below are recommended. You can add more than one of each component (e.g., more than one FR Citation.)

Legal Authority: The standard format is [## U.S.C. ####], e.g. 42 U.S.C. 5859 or 33 U.S.C. 1231

- For more information on correctly displaying statutory authority, see the [Office of Federal Register's Document Dra_ing Handbook, section 2.11](#)
- Carefully consider whether to hyperlink to a specific section of the statute, and see further Dos and Don'ts guidance below. The generic US Code link is https://www.govinfo.gov/app/collection/uscode.
- You may add information about Legal Authority that's not from the U.S. Code.

FR Citation: The standard format is [## FR ####] e.g., 75 FR 68049 or 67 FR 593

- When posting signed rules or future Federal Register documents on the web, follow the guidance in [Posting *Federal Register* Documents on the Internet (.docx)](#).

CFR Citation: The standard format is [40 CFR Part ####] e.g., 40 CFR Part 122 or 40 CFR Parts 79, 80, 85, 86, 600, 1066

- Carefully consider whether to hyperlink to a specific part of the CFR (these links change annually and would require frequent maintenance), and see further Dos and Don'ts guidance below. The generic CFR link is https://www.govinfo.gov/app/collection/cfr.

Docket Number: The standard format is [EPA-[HQ or R##]-[Program Office*XXXXX]-20XX-XXXX], e.g., EPA-HQ-OW-2010–0606 or EPA-R02-OAR-2012-0889.

Effective Date: Please use format MM/DD/YYYY, e.g. 08/12/2013 or 11/04/1999, including when multiple effective dates apply.

[**Note:** If the content on your web page relates to a rulemaking proposal, you may wish to include the Comment Period End Date: (format MM/DD/YYYY).]

Standard Dos and Don'ts for Rule-Related Web Content

- **Do** link to the official versions of documents published in the Federal Register, US Code, Code of Federal Regulations (CFR), dockets, etc. Official versions come from the Government Printing Office (GPO) or Regulations.gov. Do not post your own PDF versions, unless a document is not available digitally from GPO or Regs.gov:
    - https://www.govinfo.gov
    - https://www.govinfo.gov/app/collection/fr
    - https://www.govinfo.gov/app/collection/cfr
    - http://www.regulations.gov

Note that both U.S. Code and the CFR are updated annually; using the links to specific sections of either will require annual updates.

- **Do not** provide links to http://www.epa.gov/fedrgstr/ which was discontinued in fall 2014.
- **Do not** provide links to https://www.federalregister.gov/. The legal disclaimer at this site states that its content is "not an official, legal edition of the FR." For this reason, GPO is the source data that should always be used for Regulation or Rule links.
- **Do not** link to non-government sites, such as Cornell's U.S. Code site, when referring to U.S. law (statute or code) or regulation (rule or rulemaking).

- **Do** follow the guidance in [Posting *Federal Register* Documents on the Internet (.docx)](#) when posting any signed Federal Register documents on the web, particularly prior to their publication in the FR.
- **Do** follow [EPA web standards for external links](#) to the Federal Register, US Code, Code of Federal Regulations (CFR), or Regs.gov dockets. If you link to any website that is not hosted by the government, follow [EPA's procedures for External Site Links](#).
- **Do not** recreate content from the [EPA-wide Laws and Regulations channel](#). Any legal or regulatory summaries you write should be topically oriented for example: "The Clean Water Act and Puget Sound," not just "The Clean Water Act" (which is [already summarized](#)).
- **Do** review and include [current agency instructions on appropriate metadata for your page](#).
- **Do** let the EPA Channels Editor-in-Chief (currently Judy Dew in OEI), and the Laws and Regulations Editor (currently Caryn Muellerleile in OP) know when you are creating "Laws and Regulations" content, so they can coordinate updating links and content on other channels and web areas.

About this Standard

Original effective date: 01/05/2015
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Resource Directory Standards

A resource directory is basically a set of the best links to the best content that addresses the top tasks of the primary audiences for that resource directory topic . The resource directory is the most frequently used site design at EPA.

See: Resource Directory Guidance on One EPA Web

About this Standard

Original effective date: 09/12/2012
Last approved on: 02/14/2018
Web Council review by: 02/14/2021 (or earlier if deemed necessary by the Web Council)

Web Standard: Sidebar

Definitions

The sidebar is the vertical list of links in the le   panel of a microsite basic page. Every page within a microsite web area uses the same sidebar.

Content Requirements

- The le   sidebar must be identical on all pages within a microsite web area.
- All content within a microsite will use the same area name and sidebar.
- Use an ampersand (&) in place of "and"
- Use title case (initial capital letters) for all major words. Do not use all caps.
- Do not use acronyms unless
  - the acronym is more familiar than the phrase the acronym stands for (e.g., "PCBs" is a more familiar term than "polychlorinated biphenyls") or
  - the acronym is explained in the area name at the top of the page (Persistent Bioaccumulative and Toxic (PBT) Chemical Program).

- All text used on the le   sidebar must be an active link.
- The sidebar should not contain:
  - Newsroom
  - What's New in [Topic Name]
  - Graphics
  - Links to the normal "Contact Us" page that provides ways to contact the staff running the Web area.
    - NOTE: You may link to lists of program contacts. Label these links with specific descriptions like "State Contacts" as opposed to "Contacts" or "Contact Us." In that case, link back and forth between those other contacts pages and the "Contact Us" page. If you are soliciting comments, then use sidebar language like "Send Comments" or "Comment on the rule" instead of "Contact Us."

  - Links to search pages or search boxes
  - Links to PDF files
  - Links outside the web area, except to the home page of a parent web area.

- The sidebar is part of the EPA look and feel. Do not modify it.
- **Keep navigation simple**.

Related Information

- [One EPA Web Microsite Guidance](#)
- [WebCMS Sidebar Directions](#)
- [Standard re: Standard Link Language in Sidebar](#)(and elsewhere)

- You may create sub-links within the sidebar, using the instructions for building child links at the [Creating Navigation (Le   Sidebar) for a Microsite page](#).
- Do not use navigation menus other than the le   sidebar. Do not use right-side boxes for navigation menus.
- If a section of content has a substantial hierarchy, seriously consider creating a web area for it.

About this Standard

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Web Standard: Standard Language

Definition

EPA has been using standard language on the web site since 2002. We have terms that should be used consistently on the EPA Web site.

Content Requirements

Use THIS language if you have this type of link on your page. Do not create new terms to use instead.

- **A to Z Subject Index.** Links to subject index for the Web area topic.
- **Calendar**. More inclusive than upcoming events includes public notice periods, etc.
- **Compliance Help**. Information to help industry and individuals comply or remain in compliance with regulatory and non-regulatory requirements. Content may range from plain-language guidance to self-auditing tools to formal regulatory assistance.
- **en español**. Not "Spanish". Use if there are Spanish documents on the topic.
- **Enforcement**. Intended for information about civil, criminal and/or cleanup enforcement initiatives, activities and actions.
- **Frequent Questions**. Do not use the FAQs acronym, "Frequently Asked Questions", "Common Questions", "Key Questions" or any term other than "Frequent Questions".
- **Glossary**. Definitions of key terms.
- **Grants & Funding.** Resource information related to the topic.
- **Human Health**. Includes health information and impacts specific to your topic.
- **Laws**, or **Regulations & Standards**, or **Laws & Regulations**. Select the most appropriate term use "Laws & Regulations" if you have content covering both areas. Regulations & standards are issued under a law or statute authority.
- **Newsroom**. Links to news releases, etc. (differentiates from "New in [topic name]).
- **Partnerships.** Information about partnerships and partners who work with us on a topic. May include: government, non-government organizations, companies, other "stakeholders," etc.
- **Policy**, or **Guidance**, or **Policy and Guidance**. Select the most appropriate term use "Policy & Guidance" if you have content covering both areas. Usually relates to regulatory and official policy guidance of the agency distinct from "general" guidance, guidance on "how you can help," etc.
- **Publications**. Links to listing of EPA produced material including videos and CD-ROMs as well as all printed material.
- **Related Links**. Related links within and outside EPA.
- **Science**, or **Technology**, or **Science & Technology**. Select the most appropriate term. Use "Science" to cover science and research content. Use "Technology" for strictly application content. Use "Science & Technology" if you have content covering both areas.

- **Site Map.** Do not create a site map page. It is duplicate content. The homepage should have the web area navigation available in an organized way.
- **What You Can Do**. Actions, activities, ways to help for general public, students, etc.

About this Standard

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Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Standard Web Formats and Proprietary File Formats

Definitions

Programs create different kinds of files which are published to various formats. They have different file extensions (e.g.; .doc, .pptx, .zip). These files are rarely updated and are more likely to become redundant, outdated or trivial. Consider carefully before publishing these types of files.

Content Requirements

- The EPA standard formats for publishing information on the Web are HTML and PDF.
- Proprietary formats (e.g.; .docx, .xls, .ppt) should be used only when necessary (e.g., when providing forms for customers to complete and submit or for spreadsheets that they will use).
- When linking to other file formats, follow this format: <link>Document Title (DOCX)</link> (xx pp, yy K)
- Video and audio files should include run time. Examples:
  - Podcast Title (MP3) (03:35, 256K)
  - Video Title (WMV) (02:25, 3.4MB)

- Add proprietary format disclaimer and link to the EPA formats page.
  - Option 1: Multipurpose box contains: You may need additional so ware to view some of the links on this page. See EPA's Free Viewers and Readers page.
  - Option 2: Inline disclaimer (e.g.): Document Title (DOCX) (xx pp, xxK) Free Viewers

- You may only use file types for applications which EPA has Terms of Service agreement. Individuals may not accept most standard, online terms of service agreements. Terms of Service are negotiated at the Agency or federal level.

About this Standard

Original effective date: 09/12/2012
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Thank You Page

Definition

A page that users get when they submit a form that thanks them for their input or request.

Content Requirements

- For every form, there should be a follow-up page thanking the reader for submitting the information and offering links to continue browsing.
- At a minimum, in the main body of the page, offer a link to the area's home page.
- In Drupal WebCMS, this page is automatically created with the Contact Us Form. You can modify if needed.

Examples

A form-generated Thank You page in Drupal WebCMS

- [EPA home thank you page](#)

About this Standard

Original effective date: 01/01/2004
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Top of Page

Definitions

A Top of Page link returns to the top of the page's content. This link can be useful to visitors on pages that are longer than two or three screens.

Content Requirements

Related Information

[Style Guide: Top of Page](#)

- Use the Top of Page link to return users to the beginning of the webpage content.
- Top of Page links should be added at the end of each section or two of content on the page, depending on the length of each section.
- In the edit view of a Web CMS page, click on the Top of Page icon ⇧ to add the link ↑ Top of Page .

About this Standard

Original effective date: 09/12/2012
Date last reviewed and approved: 04/11/2018
Next Web Council review by: 04/11/2021 (or earlier if deemed necessary by the Web Council).

Web Standard: Unordered Lists: Tabs and Horizontal Links

Definition

Content that uses tabs for navigation. Content can be on multiple pages, or a single page.

Content Requirements

- **Tabs should be avoided**. However, if you absolutely need to use one, then a topic page within your site may include tabs as long as each tab is related to the overall page topic, and to each of the other tabbed topics, providing a complete set of information on the page topic in a single spot.
  - For example, on a page "Environmental Education Grants", tabs called "Grant Opportunities," "How to Apply," "Tips for Grant Applicants" etc., all relate to each other and to the page topic.

- Use the EPA standard tabs.
- If you have seven or more tabs, you should consider making the topic a web area of its own rather than including it in the microsite or resource directory you are currently developing.
- Horizontal tabs should not run on to a second line at 100% zoom on a desktop. If you see that they are running on to a second line, employ one or more of the three fixes shown in the Tabs section of the Adjusting Your Files in Response to the Look and Feel Launched December 2016 page.

About this Standard

Original effective date: 09/12/2012
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Web Standard: Videos

EPA Videos

- No videos will be uploaded to Drupal WebCMS; all videos will be posted on EPA's YouTube channel. This includes webinars, trainings, tutorials and demos. Questions? Contact Jini Ryan in the Office of Multimedia. Videos may also be posted on EPA Facebook accounts.
- For specific standards and guidance, see the links to the Office of Multimedia Video Standards and Guidelines below.
- You may be interested in the [YouTube Guidance](#), as well.

Linking to/Embedding External Videos

- **No embedding:** EPA's Office of General Counsel has concluded that embedding videos from third parties into EPA's website constitutes endorsement or preferential treatment. An employee who permits such embedding could be violating the [Standards of Ethical Conduct for Employees of the Executive Branch (PDF)](#), 5 CFR Part 2635, specifically the misuse of position standards. EPA's YouTube channel is not considered a third party.
- **Linking:** All links to external videos are subject to the same rules as any other external links. See the [External Site Links procedure](#) for more information.

Office of Multimedia (OM) Video Standards and Guidelines

- [OM home page](#) [INTRANET](#)
- [Standards and guidelines page](#) [INTRANET](#)

Web Standard: Web Area Home Page

Definitions

The page that serves as the introduction to a Web area, such as resource directory and microsite home pages.

Content Requirements

See the resource directory and microsite standards for their requirements: [One EPA Web Guidance Documents (Intranet)](#)

For all web area home pages:

- Made primarily of links to related content.
- [Follow EPA's link text standard.](#)
- Introductory text should have fewer than 50 words.
- Link to the most sought-after information. Focus on the most important tasks for your top audiences.
- OPA discourages program logos. All such logos must be approved by OPA.
- The home page must be written at a level understandable by the general public. General public is considered 8th grade reading level.

Related Links:

[Requesting a new web area](#)
[Resource Directory Guidance](#)
[Microsite Guidance](#)
[Resource Directory or Microsite?](#)

About this Standard

Original effective date: 01/01/2004
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Web Area Name

Definition

The name of the web area, located at the top of the page, that briefly describes the topic of the Web area.

Content Requirements

- Reflects the topic of the web area, not the organization providing the information.
- Shows the scope of the information accurately, but as short as possible.
- Is used on all pages within a web area.
- Use geographical designations when needed.
  - For example: San Francisco Bay Delta, Border2020 or New Bedford Harbor

- Use title case (initial capital letters) do not use all upper or lower case.
- Spell out web area names and include acronyms at the end (in parentheses). You can then use the acronym in the page content and sidebars.

Related Content

[Form to request new web area](#)

About this Standard

Original effective date: 03/28/2009
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Web Area URLs

Definitions

- URLs are Universal Resource Locators, the address where a website lives.

Content Requirements

- Each site can only have one URL.
  - There will not be multiple URLs for the same site.

- Drupal WebCMS automatically creates the URL based on the short name (defined when the web area is created).
  - A different URL (called a 'URL overwrite') can be created, if desired. It must be approved by OWC.

- Use all lowercase letters. The URL will be changed automatically to lowercase if typed with any uppercase letters.
  - Using mixed- or uppercase causes issues for search engines, users, and analytics tracking.

- Use descriptive words. You want people to find the site using search.
- Really need a shorter URL?
  - Use https://go.usa.gov/ , the official U.S. government URL shortener
  - Use the page node number
    - Example: http://www.epa.gov/node/41353 instead of using http://www.epa.gov/product-review/how-avoid-multiple-rounds-owc-review-when-creating-new-resource-directories-and

Rationale

Using more than one URL creates difficulties for:
- EPA staff in analyzing and presenting results of web analytics. A web page would appear in the analytics twice, and in order to get the true statistics for the page, the two sets of analytics would have to be added together.
- our web visitors in finding the web page using search. Search considers each URL to be a separate page each URL will get less traffic, and will have fewer other pages link to it, than if the page had only one URL. Thus, a page with multiple URLs will appear lower in search rankings than it would if it had only one URL.

How to

Fill out the [web area request form](). Office of Web Communications will approve the web area names.

Examples

- Water Research can be /water-research/, /waterresearch/ or /h2oresearch/ (pick one)
  http://www.epa.gov/water-research
- CAMEO (Computer-Aided Management of Emergency Operations) can be /computer-aided-management-emergency-operations/ or /cameo/ (pick one)
  http://www.epa.gov/cameo

Related Information

- [Web Area Request Form]()
- [Aliases on www]()

Web Standard: Web Forms

Definitions

Online forms are used to send questions or comments, register or submit registration information, or request so ware. Forms are

created using the Webforms content type. Each web area will be able to create new forms.

Content Requirements

- Pages using online forms must include an email address in case the form fails to work.
- The user must receive a follow up page thanking the person for writing.
- Every form will have an associated contact for users who do not have javascript turned on or for whom the form fails.
- Usability:
  - Title the form appropriately, describing its purpose.
  - Use title case (initial capital letters) for labels. Never use all caps.
  - Include help tips where needed.
  - Essential fields should be validated client-side (e.g., email, phone).
  - Validate the form on the server-side, in case javascript is turned off.
  - Every form will display a "thank you" confirmation page following submission.
  - Reset/cancel buttons will not be used, as they make it too easy for visitors to reset the form, losing their submission.

- Creating forms will be restricted to webmasters and editors.
- [Contact Us forms are treated separately](#).

About this Standard

Original effective date: 06/26/2011
Last approved on: 06/14/2017
Web Council review by: 06/14/2020 (or earlier if deemed necessary by the Web Council)

Web Standard: Writing for the Web

Definitions

Writing for the web is using plain language and organizing content so that it is scannable on screen.

Content requirements

Write for Your Audiences

- Clearly define the purpose and audience for each page. Do not include content that does not serve that purpose or audience.
- Use the words your visitors have in mind to help them find the content they are seeking.
- Use plain language:
  - Avoid unexplained jargon.
  - Spell out abbreviations and acronyms in the page title and the first time they appear in the main text on a page.
  - Write for an 8th-grade reading level on any pages for which a top audience is concerned citizens or another non-technical audience. Your [Sitebeam report](#) or Word can tell you about the reading level of your content.
  - Don't use all capital letters for anything.
  - Do not create strings of more than three nouns or adjectives in a row (called compound adjectives, or noun sandwiches). Examples of noun sandwiches:
    - Everglades Construction Project Stormwater Treatment Area National Pollutant Discharge Elimination System Watershed Permit and Supporting Documentation
    - Five Year Review Community Training Module Speaker Notes

- Follow standard rules of grammar and punctuation.
- Capitalize only proper nouns.
- Follow EPA style guidelines. EPA follows the [AP Stylebook](#) first, and the [U.S. Government Printing Office Style Manual](#) second.
- Break up your content into sections. Headings should appear at least every five paragraphs. This helps visitors scan the page quickly.

- Place the information that is most important to your audience at the beginning of the page and then provide additional details further down.
- Use active voice. Write "the board proposed the legislation" not "the regulation was proposed by the board."
- Use short sentences and paragraphs. Aim for no more than 25 words per sentence, 70-75 words per paragraph.
- Use bulleted and or numbered lists wherever you have a series, list, or sequence of three or more items or points.
  - If a list is more than 7 items, it is preferred to break it up and use subheadings.
  - If you can't break a list up, alphabetize.

- Make text timeless (e.g. avoid words like recently or today, etc.).
- EPA's [Procedure: Web Content Types and Review](#) requires that content owners review the content on a regular basis.

Write Good Titles and Headings

- Page titles and headings must:
  - be unique within epa.gov, and
  - specifically and accurately describe the content of the page or page section.

- Do not begin page titles with words like More, Additional, Other, Related or Further.
- Headings should not be a link, box content is excepted.
- Follow the [Headings Web standard](#)

Write Good Links

- Write link text that matches or closely matches the title of the page or page section it takes visitors to.
  - **Note:** Links outside of epa.gov must meet the requirements set out by the [External Site Links procedure.](#)

- Write descriptive and accurate link text.
  - People using screen readers will understand your link better if it fully explains where the link will take them. "More info" or "Learn more" is not descriptive link text.

- Do not use the website address (URL) for link text unless:
  - You are trying to get your visitor to remember the URL, or
  - It is likely that a large percentage of your visitors will print the page where the link is displayed.

- Visitors should understand what they'll get before they click on a link (for example, report, testimony, brochure, etc.).
- If it's not a web page, indicate the type of file/format that is behind the link (video or audio, PDF, DOC, etc.).

- Add links below or beside the content. Links in a list are preferable to links embedded in a paragraph because they are easier for people to scan on the screen.
- Always link to a relevant content page (not a web area home page) whether the link is internal or external.
- Do not use different text on the same page to go to the same link.
- Avoid linking to the same content more than once on a page.
- Do not use same link text for different links on the same page.
- Do not highlight text to create an anchor tag. It looks like a link but it isn't which is very confusing for a visitor.

About this Standard

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