

documents, should meet the file format specifications delineated in this section. Note: any electronic file that can be converted to PDF format (spreadsheets, slide presentations, etc.) Is considered a document by the NRC and is subject to these specifications.

Submittals may also contain other forms of electronic information including data files, computer models, and video or audio clips that are not considered documents. These files are not required to conform to the file format specifications established for documents.

2.1 File Formats

Electronic materials should be submitted in PDF or otherwise meet the specifications delineated in this section.

The following table defines the particular PDF output file formats and their use when submitting electronic documents to the NRC:

PREFERRED PDF OUTPUT FILE FORMAT

File format	Version	Filename extension	Recommended use
Adobe® Acrobat Portable Document Format (PDF) Formatted Text and Graphics (Formerly known as PDF Normal). Options should be set according to the settings described in Section 2.6.	Current or 2 previous	pdf	Textual documents converted from native applications only*,**.
Adobe® Acrobat PDF Searchable Image (Exact) [formerly known as PDF Original Image with Hidden Text]. Options should be set according to the settings described in Section 2.6.	Current or 2 previous	pdf	Textual documents converted from scanned documents.
Adobe® Acrobat PDF Image Only. Options should be set according to the settings described in Section 2.6.	Current or 2 previous	pdf	Preferred format for graphic-, image-, and forms-oriented documents (not for capture of text).

* Textual documents scanned from original paper copies converted to PDF Formatted Text and Graphics result in capture of only a text file that contains OCR conversion errors. This inaccurate representation of the original document is not acceptable for capture by the NRC as an archival record. If the native format of a document is not available for creating a PDF file, the NRC recommends that Searchable Image (Exact) PDF be generated from a scanned image of the document. This will create a PDF file that contains a 100% accurate representation of the original document which will be acceptable for transfer to the National Archives.

** Adobe® PDF Formatted Text and Graphics files that contain embedded images of text will not be accepted. These files are usually a result of cutting and pasting images of text, instead of the text itself, from one document to another while creating documents using word processing applications. This practice results in a picture of the text being created that is not full text searchable. However, images of text that are intended as a graphical representation only and are not meant to convey the information contained in the text will be accepted.

Note: Adobe has recently established a fourth PDF output file format (PDF Searchable Image (Compact)) that uses compression techniques to reduce file sizes of images. This is not an acceptable format for submission to the NRC because it uses lossy compression techniques that do not

result in a true and accurate representation of the original document.

Images originally created in a Tagged Image File Format (TIFF) that are primarily graphic-oriented in nature may be converted to PDF for submission to NRC using the PDF Image Only format as described above.

The NRC recommends that the results of spreadsheet applications be converted to one of the acceptable PDF file formats. The NRC staff may also require spreadsheet data to perform additional calculations/analyses. Spreadsheet data may be submitted using the following acceptable formats.

File format	Version	Filename EXTENSION	Preferred Use
Microsoft® Excel	Current or 2 previous	xls	Spreadsheet calculations.
Corel® QuattroPro	Current or 2 previous	wb3	Spreadsheet calculations.
Lotus® 1–2–3	Current or 2 previous	wk3/wk4	Spreadsheet calculations.

When submitting an electronic file using one of the acceptable formats, do not change the default, three-character extension for the file (e.g., a document prepared as "license_amendment.pdf" should be submitted with the ".pdf" file extension and a document prepared as a Microsoft Excel spreadsheet should be submitted with the ".xls" file extension).

2.2 Naming Conventions

Documents submitted to the NRC must:

- Conform to ISO 9660 format, including following the Joliet Extension.
- Have filenames that are limited to 49 characters (including the "." and the three-character filename extension).
- Retain the default three-character file extension associated with the format in which the document was created (Example: for files created to conform to Adobe's Portable Document Format, ".pdf"; for files created using Microsoft Excel, ".xls").

• Include a three-digit numeric prefix (e.g., 001, 002, 003) in the filename that designates the correct order of the files contained in the submission, followed by the name of the file (Example: "001filename of first document.pdf").

• Filenames should be based on the logical breakpoint used for segmentation of the document (e.g., chapter, section, etc.) as described in Section 2.14.

FILE NAMING EXAMPLE TABLE

Document title	File name
Multiple File Documents	
Chapter 1, Section 1 Estimate of Long-Term Geo-chemical Behavior ...	001_1.1 Estimate of Long-Term Geochem Behavior.pdf.
Chapter 2, Section 2 Estimate of Long-Term Geo-chemical Behavior ...	002_2.2 Estimate of Long-Term Geochem Behavior.pdf.
Appendix A Estimate of Long-Term Geo-chemical Behavior	003_Ap A Estimate—Long-Term Geochem Behavior.pdf.