



Adobe

Last Name	Total Sales	Total Sales	Total Sales	Total Sales	Grand Total
Buchanan	\$11,040.00	\$8,892.48	\$4,364.30	\$4,168.00	\$33,185.20
Dodsworth	\$14,608.38	\$8,120.70	\$21,969.28	\$5,530.21	\$13,546.16
TIFA	\$17,067.20	\$19,160.70	\$30,861.76	\$9,894.51	\$15,232.16
	\$3,237.12	\$19,992.23	\$17,885.82	\$966.80	\$15,108.34
	\$6,647.67	\$8,686.72	\$15,925.56	\$5,692.20	\$16,437.92
	\$12,975.80	\$9,649.99	\$32,394.91	\$5,280.00	\$20,263.93
	\$8,572.57	\$18,625.08	\$29,644.07	\$17,000.00	\$8,017.00
	\$31,433.16	\$56,954.02	\$95,850.36	\$17,000.00	\$59,827.19
	\$19,481.89	\$27,030.85	\$26,351.00	\$82.56	\$19,757.48
	\$210.00	\$20,697.10	\$34,210.00	\$36,907.62	\$24,802.41
	\$19,691.89	\$47,727.95	\$60,000.00	\$4,573,790.18	\$44,559.89
	\$98,792.25	\$123,842.67	\$100,000.00	\$162,769.78	\$119,619.24
					\$738,751.33

**Desk Reference
Guide for
PDF Document
Generation**

February 1st, 2017 - Version 4.0

PREFACE

Disclaimer:

Information contained herein is for informational and educational purposes solely and is not an endorsement of any product contained in these materials. Any copyrighted materials, referred to herein, are subject to the protections of copyright law.

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1.0 Introduction

The NRC has prepared this “Desk Reference Guide for PDF Document Generation” to help its customers and other Federal agencies generate PDF (Portable File Format) files that comply with NRC’s “Guidance for Electronic Submissions to the Commission” (<https://www.nrc.gov/docs/ML1303/ML13031A056.pdf>). This guide gives the required custom settings for generating PDF files from commonly used applications in Microsoft Office Suite 2013 such as MS-Word, PowerPoint, MS-Excel, etc.. It does not address special applications to include scanning software and graphics enhancement software such as Adobe Photoshop and Corel Draw, or any software that comes with your scanner. It does not address hardware configurations for scanning text or graphic images to generate a PDF file. This document was created and tested using Adobe Acrobat XI Professional, Microsoft Office 2013. Please contact the manufacturers for instructions on software or hardware that is not mentioned in this desk reference guide.

2.0 Support and Contact Information

▪ Feedback

We want to hear from you. If you do not find the information you need in this guide or wish to send comments, find broken link(s) on our Web site, or have problems finding information on our Web site, please contact the NRC Web Team by completing the form at <http://www.nrc.gov/site-help/e-submittals/contact-us-eie.html>.

▪ Technical support

If you have technical problems in complying with the “E-Rule” guidance, such as converting documents to PDF files, setting software configurations, fixing problems with deficient submittals, or any questions regarding materials discussed in this guide please contact the Help Desk by telephone (toll free) at 866-672-7640 or by email using the form on the NRC web site at <http://www.nrc.gov/site-help/e-submittals/contact-us-eie.html>.

3.0 System Requirements and Recommendations

3.1 Adobe Acrobat XI Professional requirements

Windows

- Intel® 1.3GHz or faster processor
- Microsoft Windows® XP with Service Pack 3 for 32 bit or Service Pack 2 for 64 bit; Windows Server 2008 or 2008 R2 (32 bit and 64 bit); Windows 7 (32 bit and 64 bit); Windows 8 or 8.1 (32 bit and 64 bit)
- 256MB of RAM (512MB recommended)
- 320MB of available hard-disk space
- 1,024x768 screen resolution
- Internet Explorer 7, 8, 9, 10, or 11; Firefox Extended Support Release; Chrome
- DVD-ROM drive

- scanner (optional)
- Video hardware acceleration (optional)

Macintosh

- Intel® processor
- Mac OS X v10.6.4, v10.7.2, or v10.8
- 1GB of RAM
- 320MB of available hard-disk space
- 1,024x768 screen resolution
- Safari 5.1 for Mac OS X v10.6.8 or v10.7.2; Safari 5.2 for Mac OS X v10.8; Safari 6.0 for Mac OS X v10.7.4 or v10.8
- DVD-ROM drive
- scanner (optional)

4.0 Software Setup and Configuration

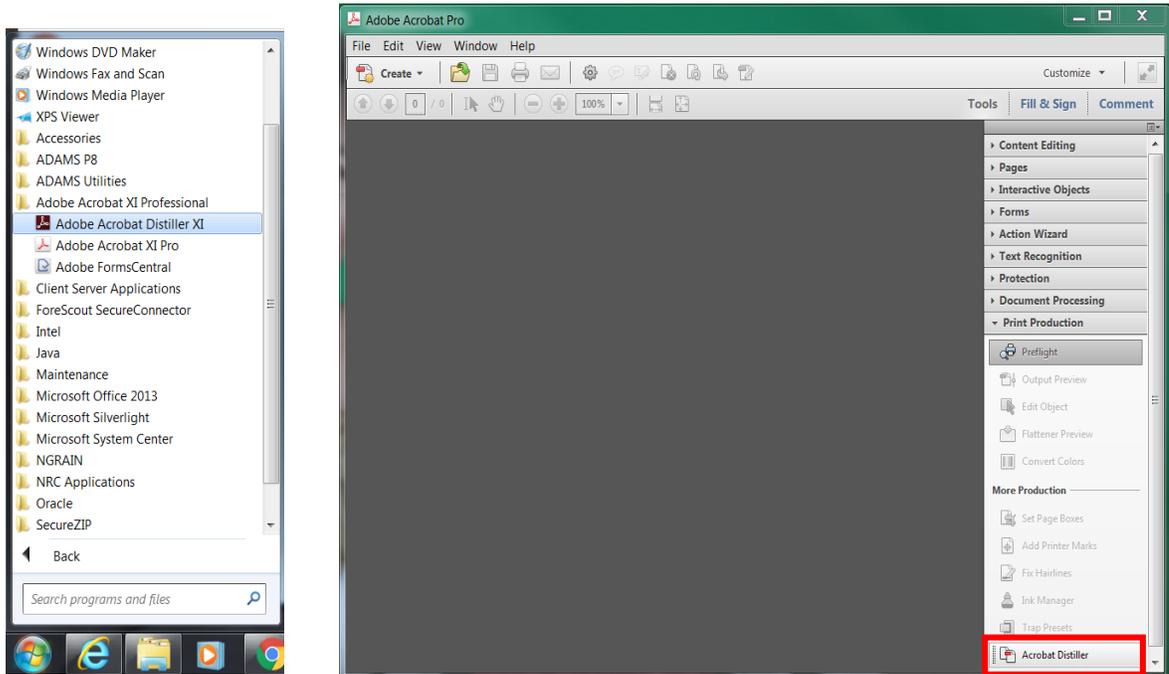
4.1 Setting Up and Configuring Adobe Acrobat Distiller/PDFMaker and Setting Preferences



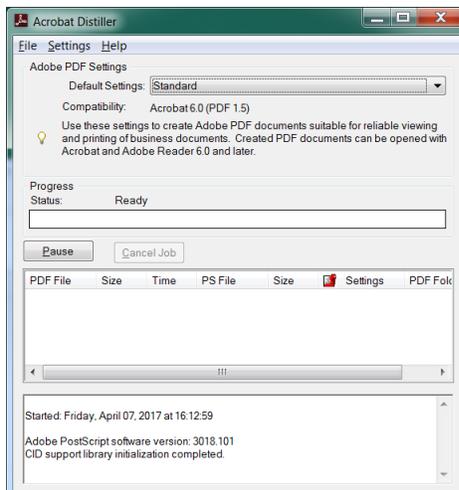
You can download and install a Distiller Job Options file (profile) created by NRC by following instructions in question 4 of the FAQs section.

Launch Adobe Acrobat Distiller by clicking on **Windows Start > Programs > Adobe Acrobat Professional > Adobe Acrobat Distiller XI** or while in Adobe Acrobat Professional, select **Tools > Print Production > Acrobat Distiller**.

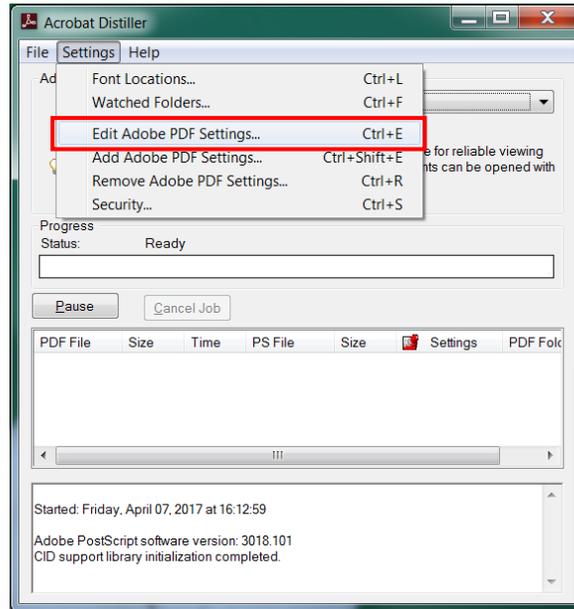
4.1.1 Adobe Acrobat XI Professional



The **Acrobat Distiller** window pops up.

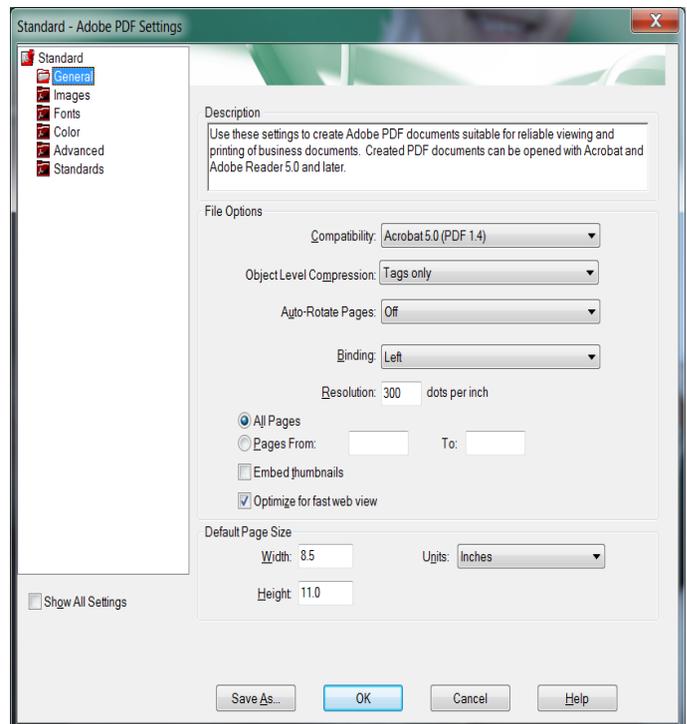


Change the settings by going to the pulldown menu and selecting **Settings > Edit Adobe PDF Settings**.



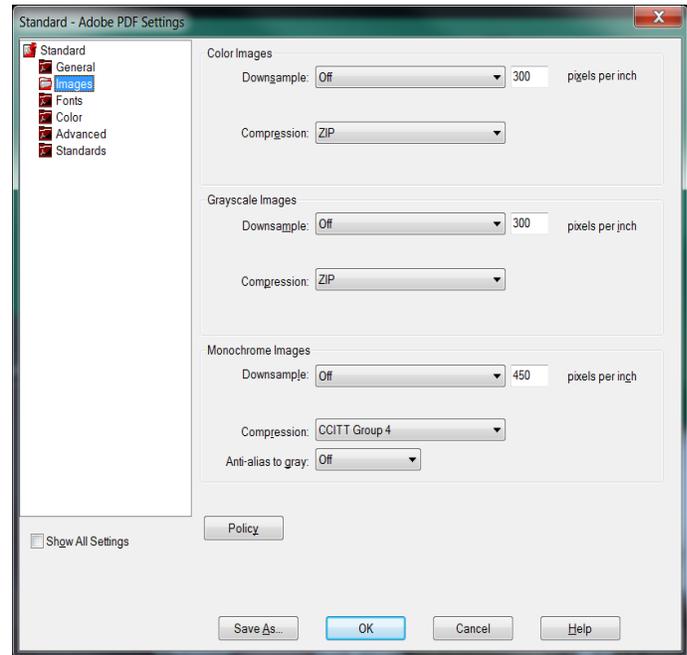
The **Standard - Adobe PDF Settings** window pops up. On the default **General** folder, change the following settings.

- In the **Description** section enter: Use these settings to create Adobe PDF documents suitable for compliance with 10CFR1, Appendix A. Created PDF documents can be opened with Adobe Reader 5.0 and later.
- From the dropdown menu, set **Compatibility** to Acrobat 5.0 (PDF 1.4).
- Keep Tags only as the **Object Level Compression** default.
- Set **Auto-Rotate Pages** to Off.
- Keep Left as the **Binding** default.
- Set **Resolution** to 300 dots per inch.
- Verify that **All Pages** is selected.
- Verify that **Optimize for fast web view** is checked.



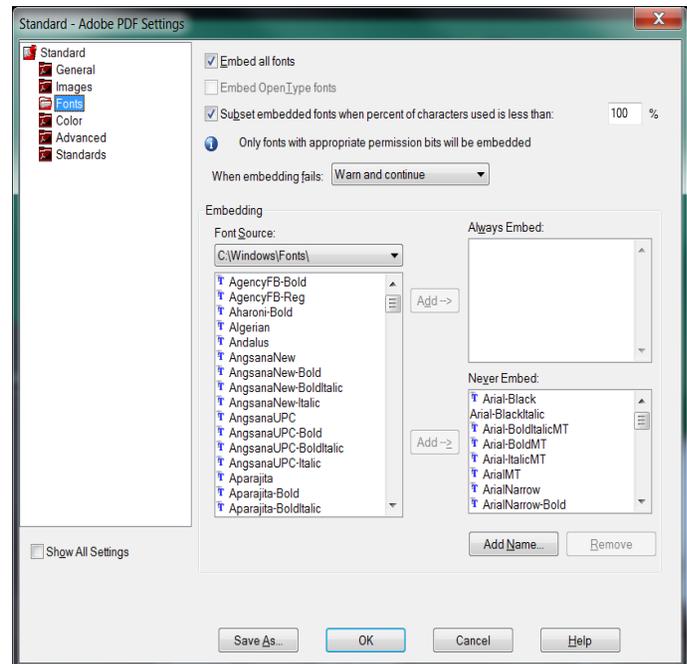
Select the **Images** folder and change the fields for all sections as follows:

- **Color Images**
Downsample: Off
Compression: ZIP
300 ppi
- **Grayscale Images**
Downsample: Off
Compression: ZIP
300 ppi
- **Monochrome Images**
Downsample: Off
Compression: CCITT Group 4
Anti-alias to gray: Off
450 ppi



Click on the **Fonts** folder and—

- Verify that the **Embed all fonts** box is checked.
- Verify that **Subset embedded fonts when percent of characters used is less than is** checked and set at 100%.
- Keep Warn and continue as the default for **When embedding fails**.
- In the **Embedding** section, verify that **Font Source** is set to C:\WINDOWS\FONTS\ and remove everything in **Never Embed** (if there is anything) by selecting everything in the **Never Embed** field and clicking on **Remove**.



Click on the **Color** folder. In the **Adobe Color Settings** section—

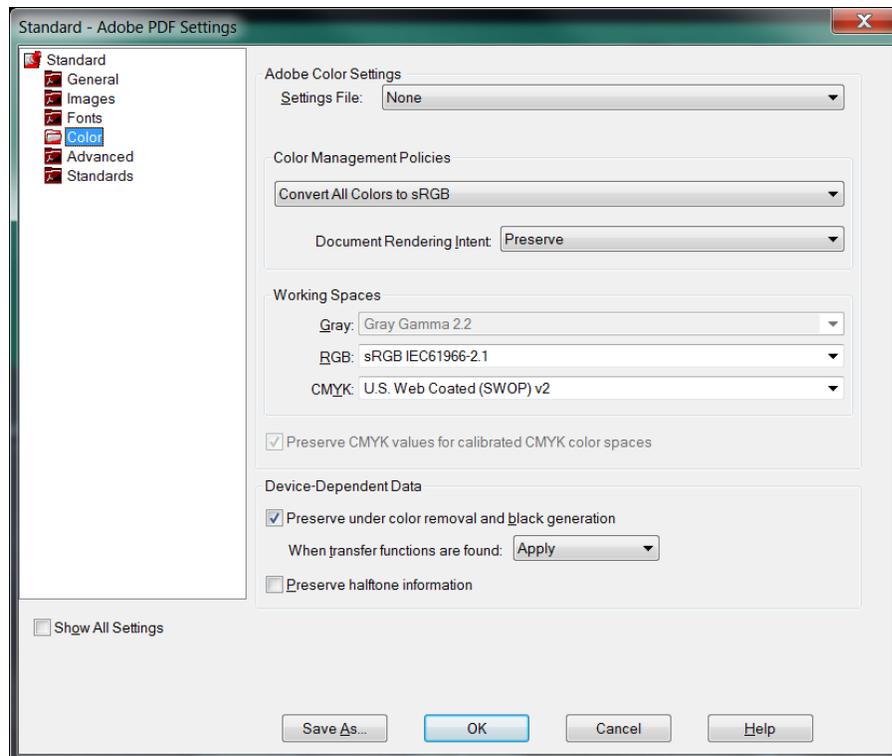
- Make sure **Settings File** is set to None.
- Change **Color Management Policies** to Convert All Colors to sRGB.
- Keep **Document Rendering Intent** set to Preserve.

For the **Working Spaces** subsection—

- Set **Gray** to None.
- Keep **RGB** set to sRGB IEC61966-2.1.
- Keep **CMYK** set to U.S Web Coated (SWOP) v2.

In the **Device-Dependent Data** section—

- Check the **Preserve under color removal and black generation option**.
- Set **When transfer functions are found** to Preserve.

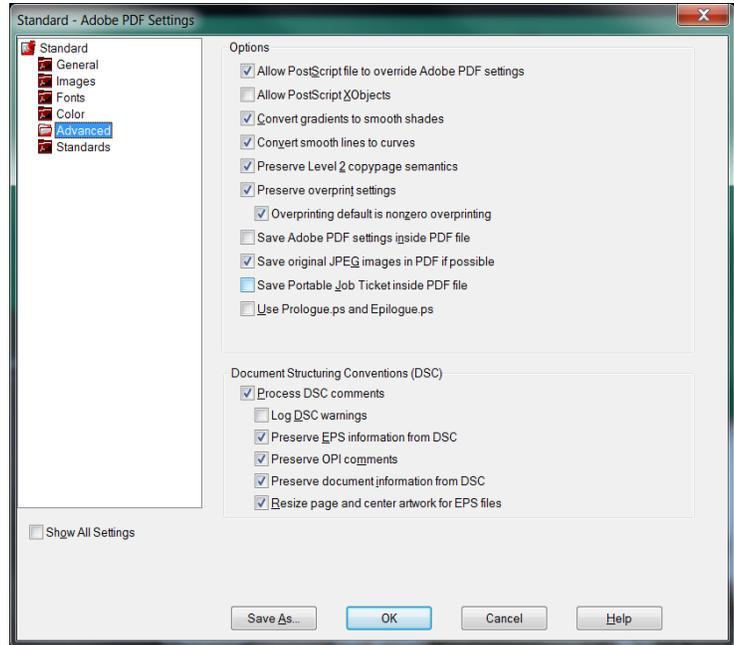


Click on the **Advanced** folder and make sure the following items in the **Options** section are selected and checked:

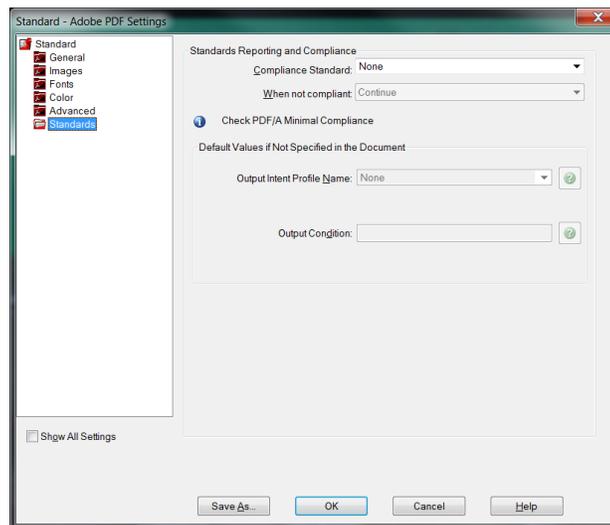
- Allow PostScript file to override Adobe PDF settings.
- Convert gradients to smooth shades.
- Convert smooth lines to curves.
- Preserve Level 2 copypage semantics.
- Preserve overprint settings.
- Overprinting default is nonzero overprinting.
- Save original JPEG images in PDF if possible.
- Save Portable Job Ticket inside PDF file.

The following items should be checked and enabled in the **Document Structuring Conventions** section:

- Process DSC comments.
- Preserve EPS information from DSC.
- Preserve OPI comments.
- Preserve document information from DSC.
- Resize page and center artwork for EPS files.

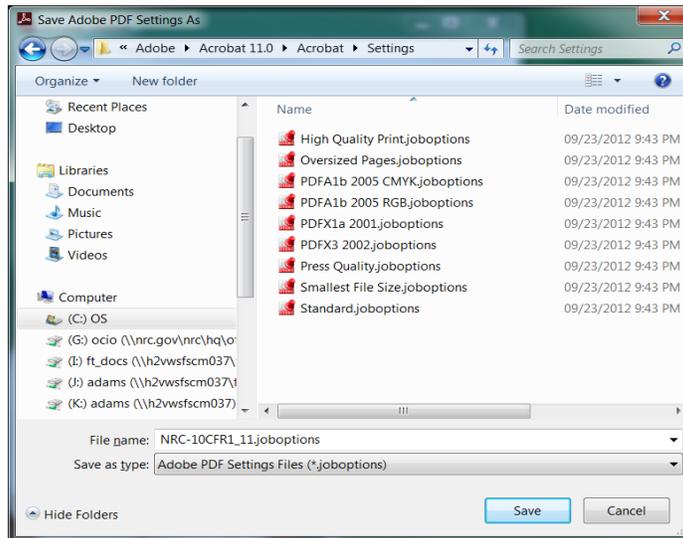


Click on the **Standards** folder. Leave everything as is in the **Standards Reporting and Compliance** section and verify that **Compliance Standard** is set to None.

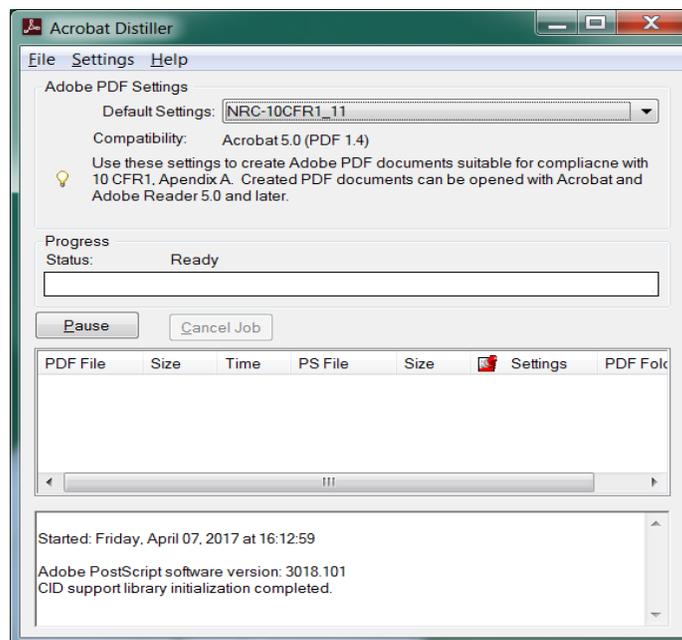


Click on  in the bottom left corner of the window to save the changes.

In the **File Name** field, enter NRC-10CFR1_11.joboptions as a new profile name (or whatever name you want to call it). Click on **Save**. Then **OK**.



The **Acrobat Distiller** window now pops up. Verify that **Default Settings** is set to your newly created profile (for example, "NRC-10CFR1_11"), as in the screen below.

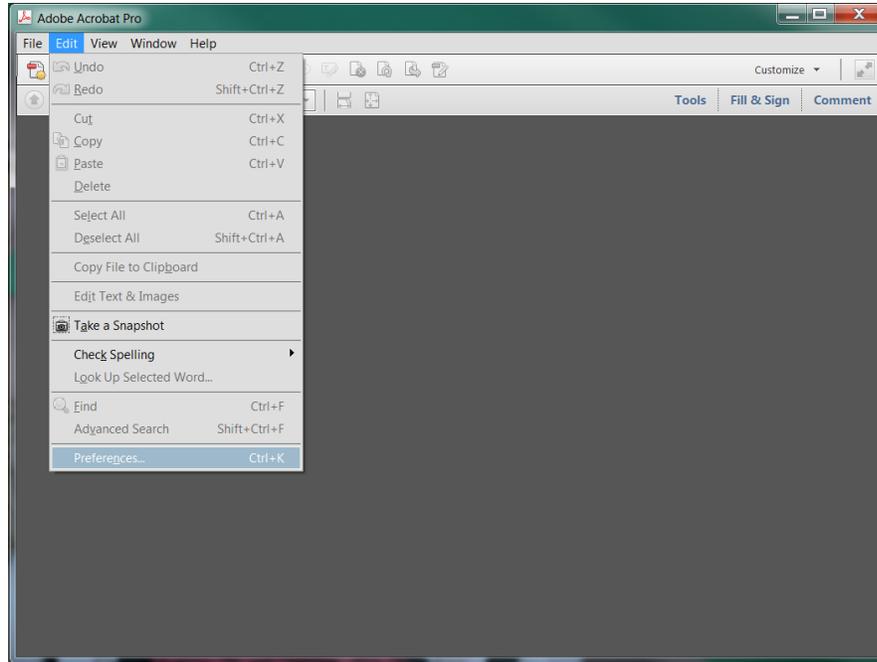


Select **File > Exit** or click on  to close Acrobat Distiller.



It is important to set the preferences in Adobe Acrobat so you can convert different types of documents to PDF while in Adobe Acrobat.

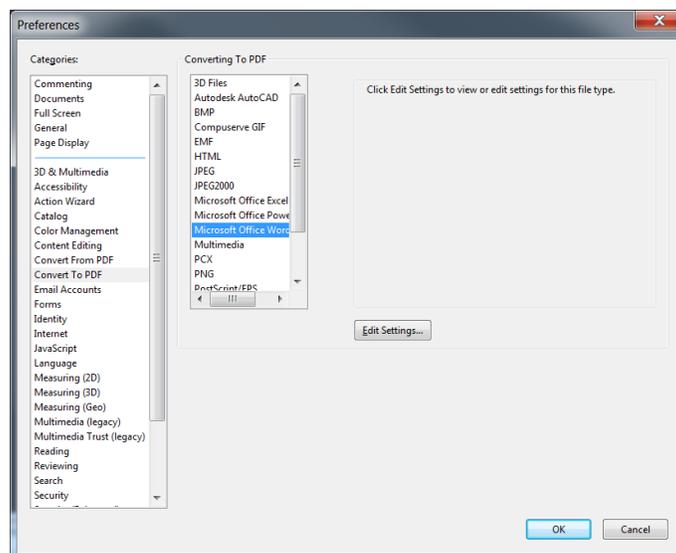
From the main menu, click on **Edit > Preferences** to set the preferences.

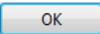


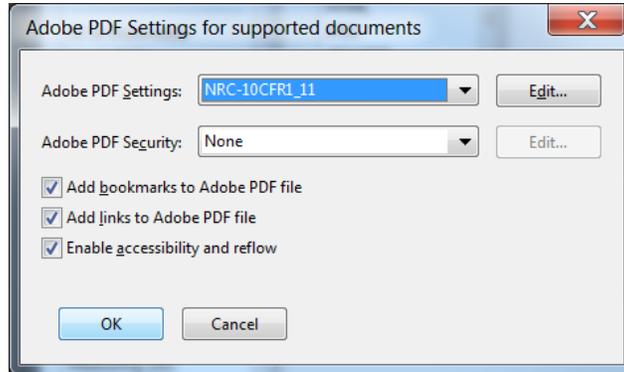
In the **Preferences** window, select **Convert To PDF** option from the **Categories** subwindow. You will see a list of application in the **Convert to PDF** subwindow. One of these applications may be the application used to create your document. The screen below gives configuration instructions for Microsoft Office, Project, and Publisher documents and TIFF images. Select and change the configurations for your application.

Microsoft Office Word

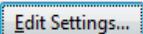
- Select **Microsoft Office Word** and click on  .



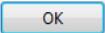
In the **Adobe PDF Settings for supported documents** window, click on the dropdown menu and select the newly created profile (for example, "NRC-10CFR1_11"). Then click  .

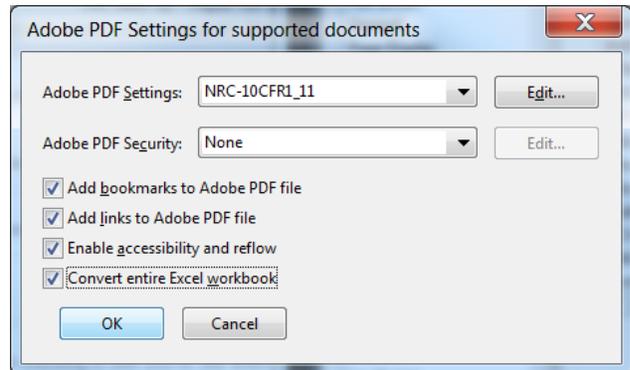


Microsoft Office Excel

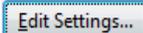
- Select **Microsoft Office Excel** and click on  .

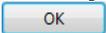
In the **Adobe PDF Settings for supported documents** window, click on the dropdown menu and select the newly created profile (for example, "NRC-10CFR1_11").

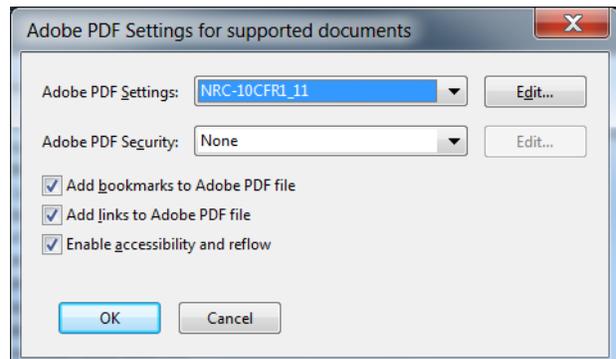
Click on **Convert entire Excel workbook** to ensure that the conversion of the whole Excel workbook is supported. Then click on  .



Microsoft Office PowerPoint

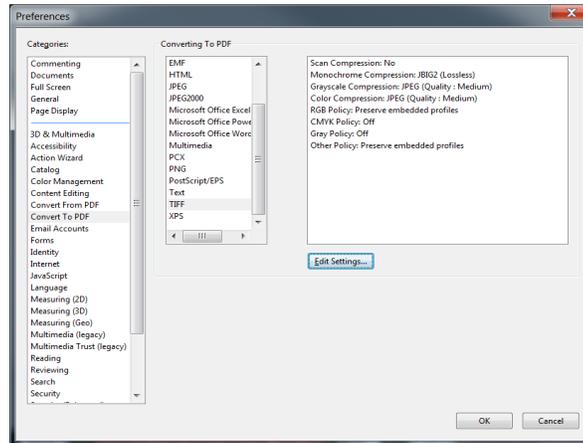
- Select **Microsoft Office PowerPoint** and click on  .

In the **Adobe PDF Settings for supported documents** window, click on the dropdown menu and select the newly created profile (for example, "NRC-10CFR1_11"). Then click on  .



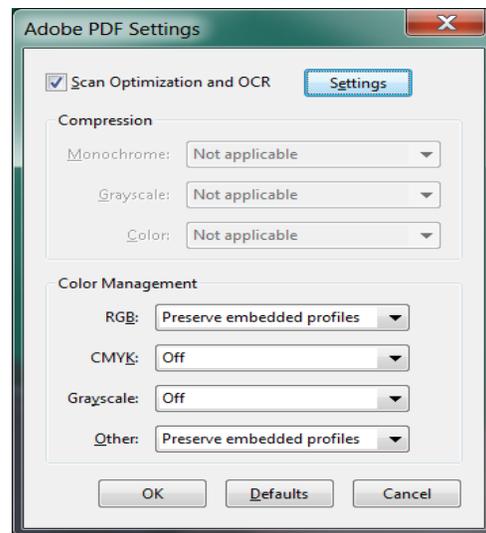
TIFF

- Select **TIFF** then click on **Edit Settings...**



In the **Adobe PDF Settings** window, select **Scan Optimization and OCR**. Click on

Edit Settings...

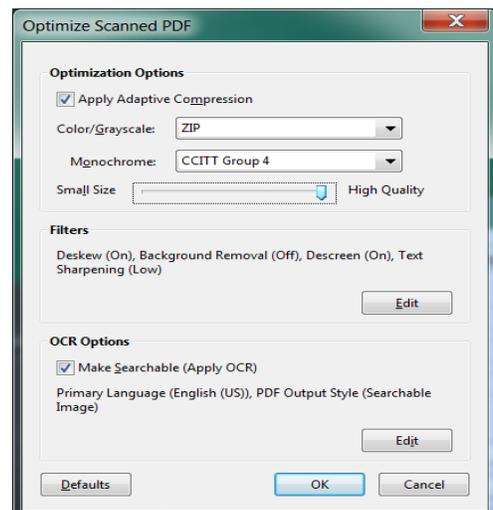


Change the settings in the **Optimization Options** section as follows:

- Set Color/Grayscale to ZIP
- Set Monochrome to CCITT Group 4
- Move Slider to High Quality

Click on **OK**.

Click on **OK** again to close the **Preferences** window.

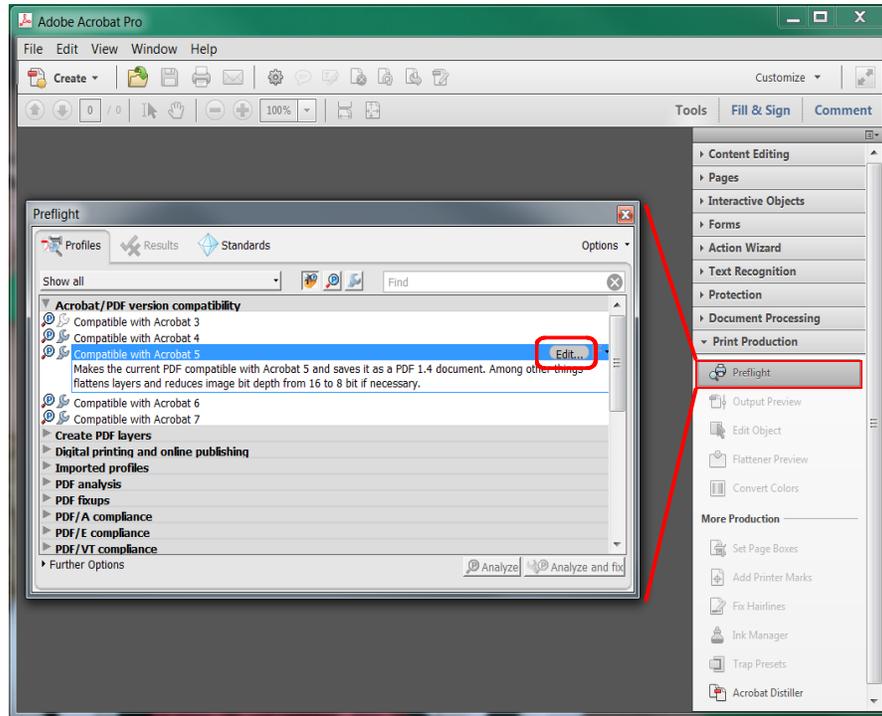


4.2 Setting Up and Configuring Adobe Preflight for— 4.2.1 Adobe Acrobat XI Professional

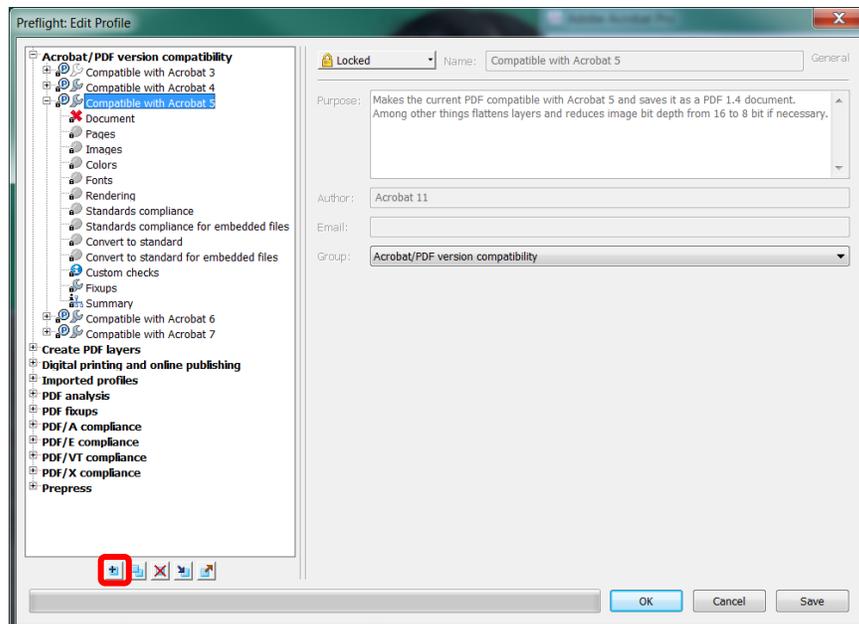


You can download and install a NRC created Adobe Preflight profile by following instructions in question 4 of the FAQs section.

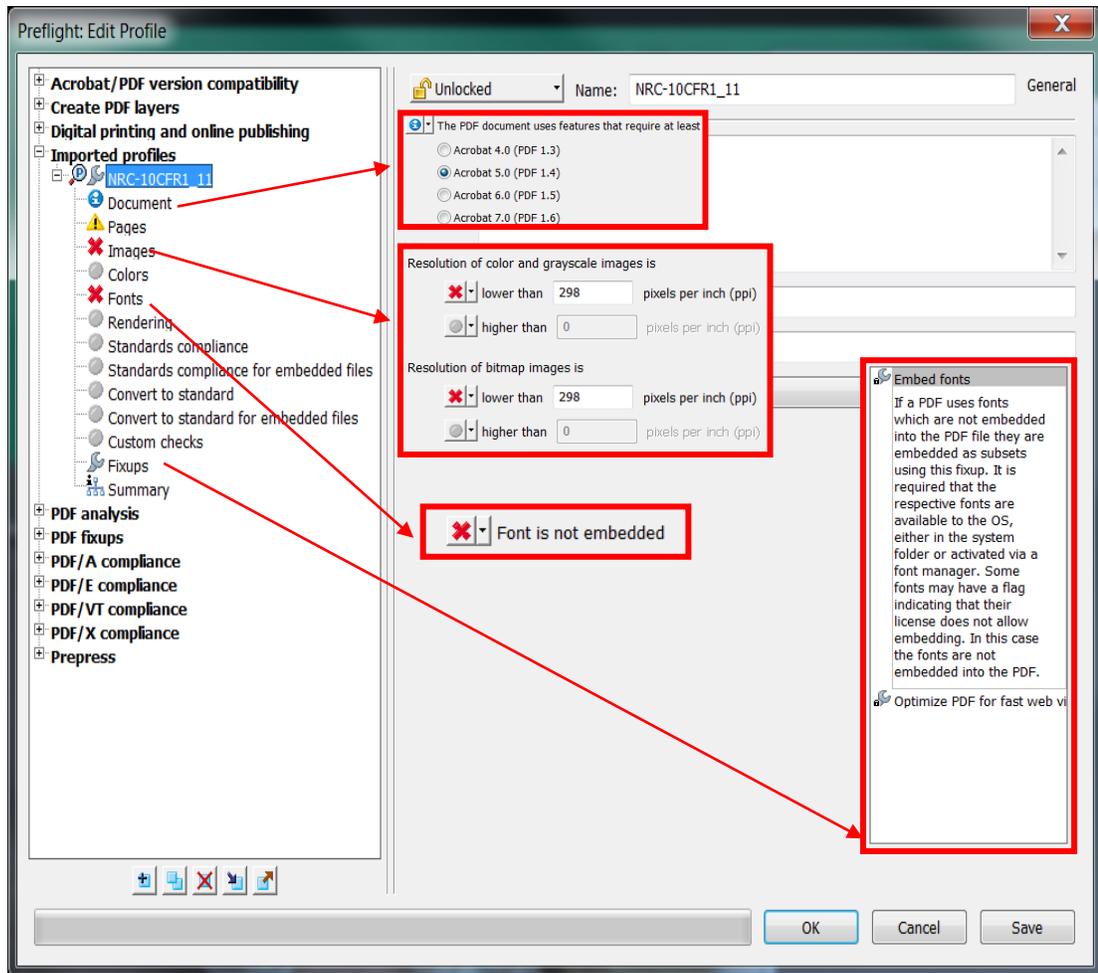
Launch Adobe Acrobat XI Professional. From the main menu, click on **Tools>Print Production** and select **Preflight**.



- From the **Preflight** window, select a profile and click on **Edit** from the menu bar.
- In the **Preflight: Edit Profiles** window, click on  to create a new profile designate to NRC.



- Give the new profile a name (e.g., “NRC-10CFR1_11”).
- Edit the subcomponents as follows:



- Then click on .

The new Preflight profile is created and can be used later for testing. See section 6.4.

5.0 Conversion Information

5.1 Converting Microsoft (MS) Office Suite 2013 to PDF

5.1.1 MS-Word

Please follow these steps for all of the MS-Office Suite including PowerPoint, Excel, Publisher, Access and Project.



Important: If you haven't done so, follow the instructions in Section 4.1, "Setting up and configuring Adobe Acrobat Distiller/PDFMaker and setting preferences", to create an Acrobat Distiller/PDFMaker profile.



*** Please make sure all the sensitive/unwanted text or images are completely removed before proceeding any further. Instructions to remove/delete sensitive/unwanted text can be found at

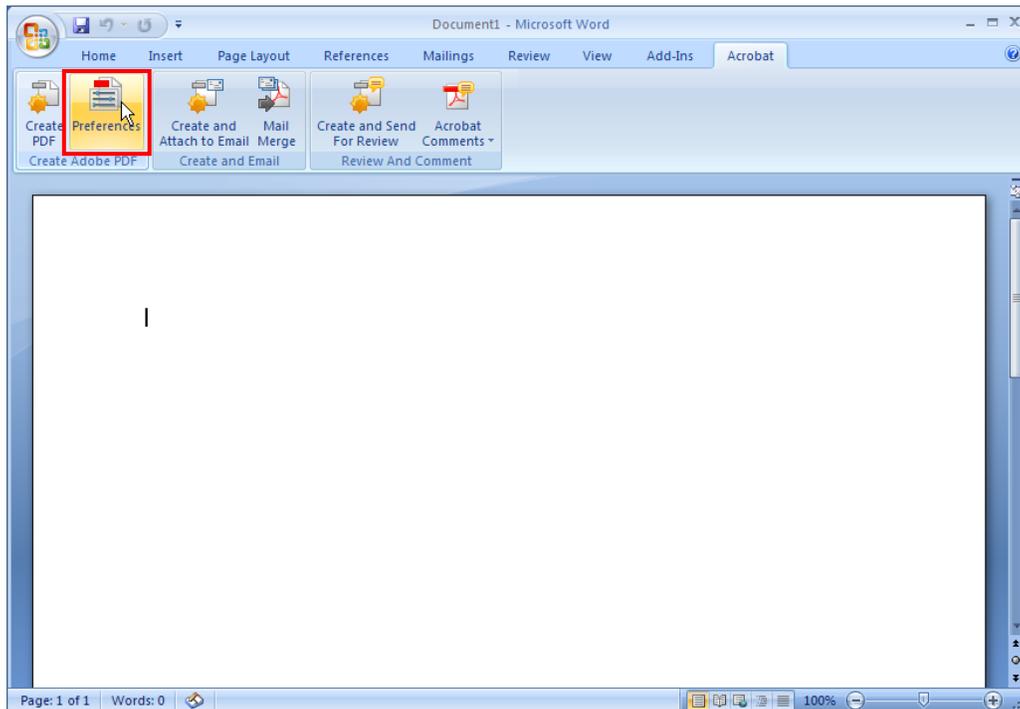
<http://adamswebsearch.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML060760600>.

Launch Microsoft Word (either on the desktop or from **Start > Programs > Microsoft Office 2013 > Word 2013**).

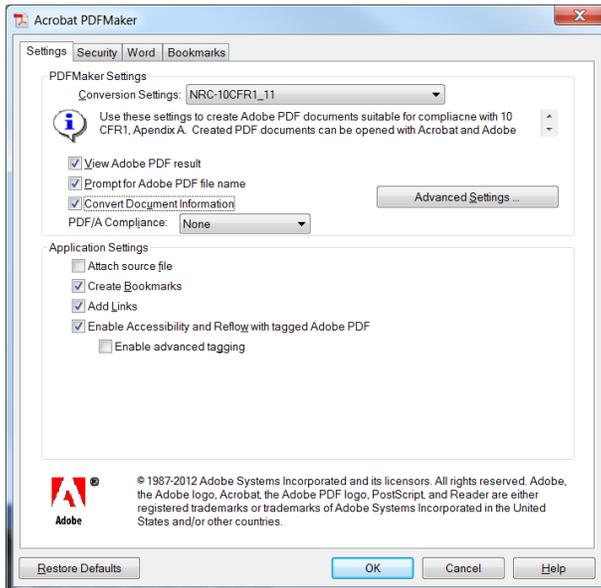
Verify that the Microsoft Word conversion settings match the profile you created in Section 4.1 by going to the main menu and clicking on **Acrobat**, then click on **Preferences**.



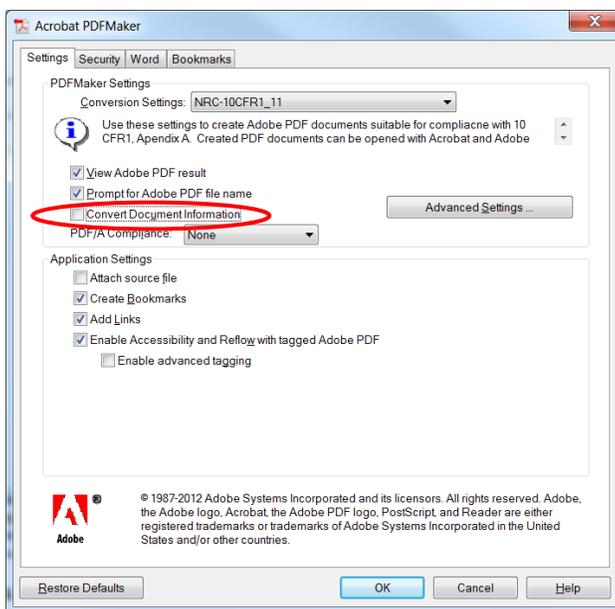
Do so once and then leave the settings alone unless you want to use other settings. When you have configured and saved the Acrobat PDFMaker settings, start the conversion process on page **19** of this section.



The **Acrobat PDFMaker** window pops up.



Click on the **Settings** tab then in the **Conversion Settings** field of the **PDFMaker Settings** section. Click on the dropdown arrow and select the profile you have created (e.g., "NRC-10CFR1_11"). Uncheck **Convert Document Information**.

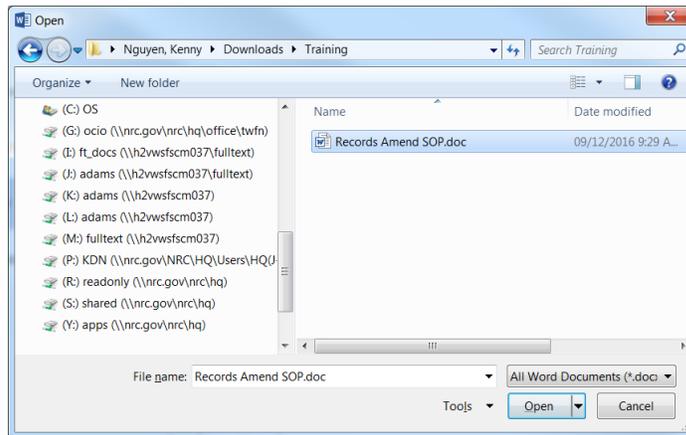


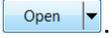
Leave the settings on the other tabs as they are. Click on .

- Follow the steps below to convert a Microsoft Office Word 2013 document to PDF.

Launch Microsoft Word (either on the desktop or from **Start > Programs > Microsoft Office 13 > Word 2013**).

Open a Word document by clicking on  > **Open** or **Ctrl+O**. The **Open** window appears.



Select the Microsoft Word document you want to convert to PDF and click on .

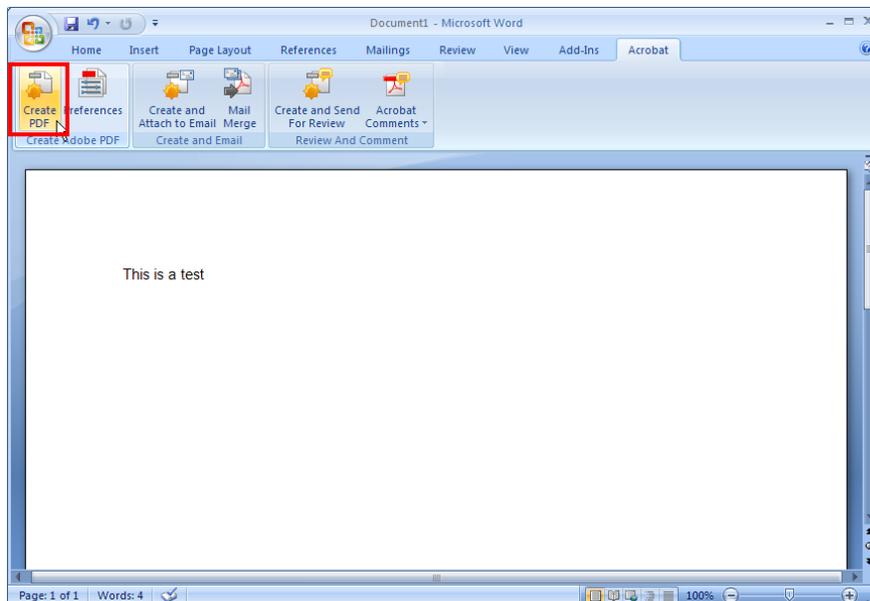
 Remove all hyperlinks to other electronic files or Web sites unless the document includes a disclaimer that the hyperlinks are either inoperable or are not essential to the filing.

 There are 2 ways/methods to convert a Microsoft Office Word 2013 to PDF file, "**Create PDF**" and "**Print to PDF**".

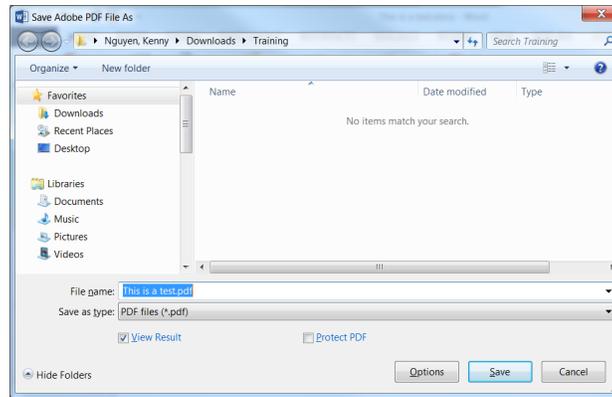
- 5.1.1a "**Create PDF**" method:

 If you are using an older version of Microsoft Word or Adobe Acrobat 5.0 or older, please follow the instructions on page **21**, "**Print to PDF**".

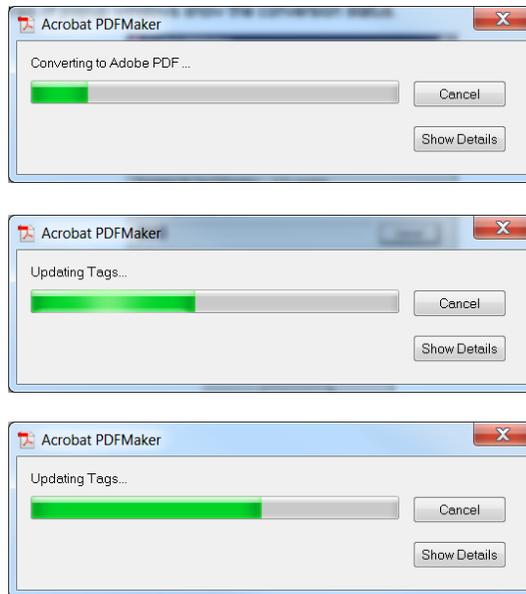
From the main menu, click on **Acrobat** tab and click on **Create PDF**.



The **Save Adobe PDF File As** window pops up. Enter the name you want in the **File Name** field, then click on .



A series of popup windows show the conversion status.



When the conversion process is completed, the Microsoft Office Word 2013 document is converted into a PDF document and Adobe Acrobat Professional (or Adobe Acrobat Reader) may launch automatically with the new PDF document.

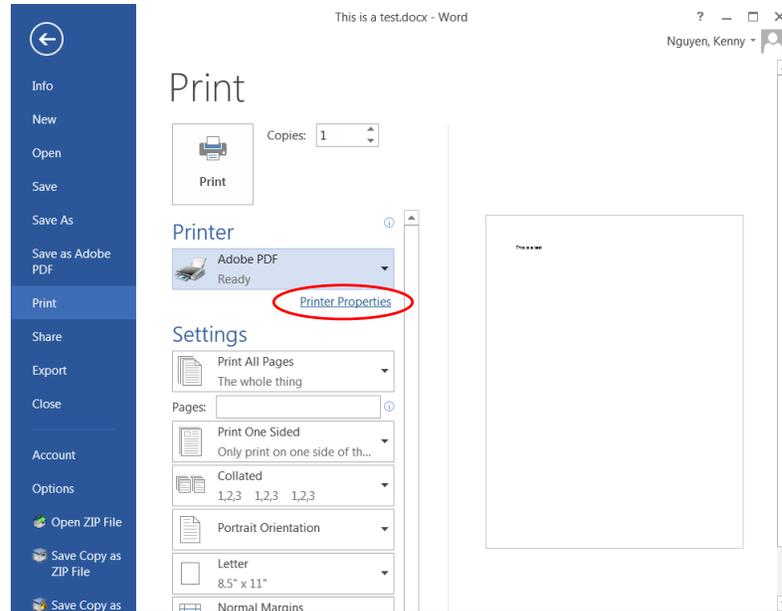
▪ **5.1.1b “Print to PDF” method:**



Remove all hyperlinks to other electronic files or Web sites unless the document includes a disclaimer that the hyperlinks are either inoperable or are not essential to the filing.

From the main menu, click on **File > Print**.

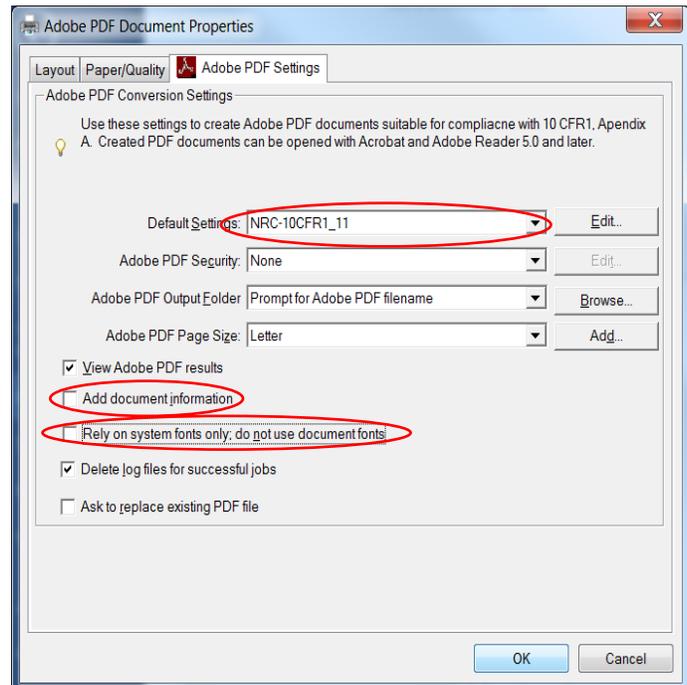
Change the Printer to **Adobe PDF**. Click on **Printer Properties**.

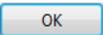


On the **Adobe PDF Document Properties** screen.

- Click on the **Adobe PDF Settings** tab and change the following settings:
- Change the **Default Settings** to **NRC-10CFR1_11** (the default profile created in Section 4.1).
- Uncheck **Add document Information** (optional)
- Uncheck **Rely on system fonts only; do not use document fonts**

(This will ensure that the fonts are embedded and exclude document's Properties information.)



Click on . Click on  to start the conversion process.

When the conversion is completed, the Microsoft Office Word 2013 document is converted to a PDF document and Adobe Acrobat Professional (or Adobe Acrobat Reader) may launch automatically with the new PDF document.

6.0 Verifications and Document Testing Before Submission

6.1 Searchable Text (Hidden Text Error)

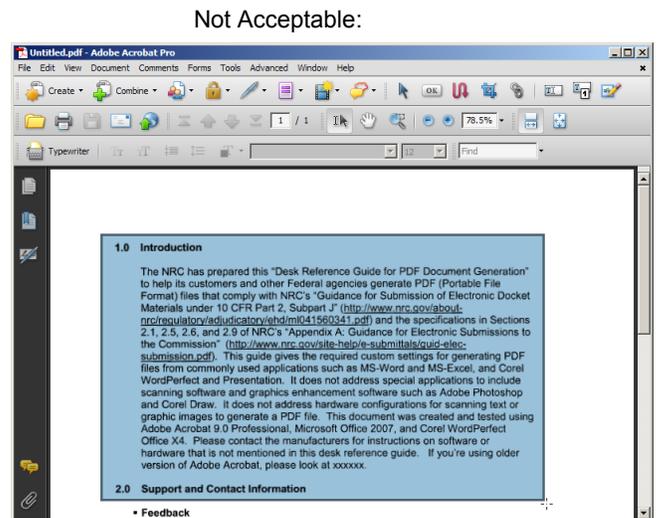
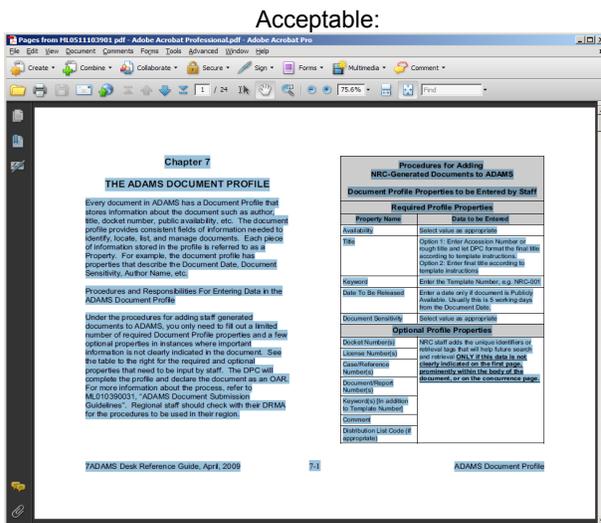
Follow these steps to verify that Optical Character Recognition (OCR) has been applied correctly to the image-only scanned pages.

- Open the PDF document in Adobe Acrobat Professional.

 Make sure you're in the "Scrolling pages" view  and **not** the "One full page"  view.

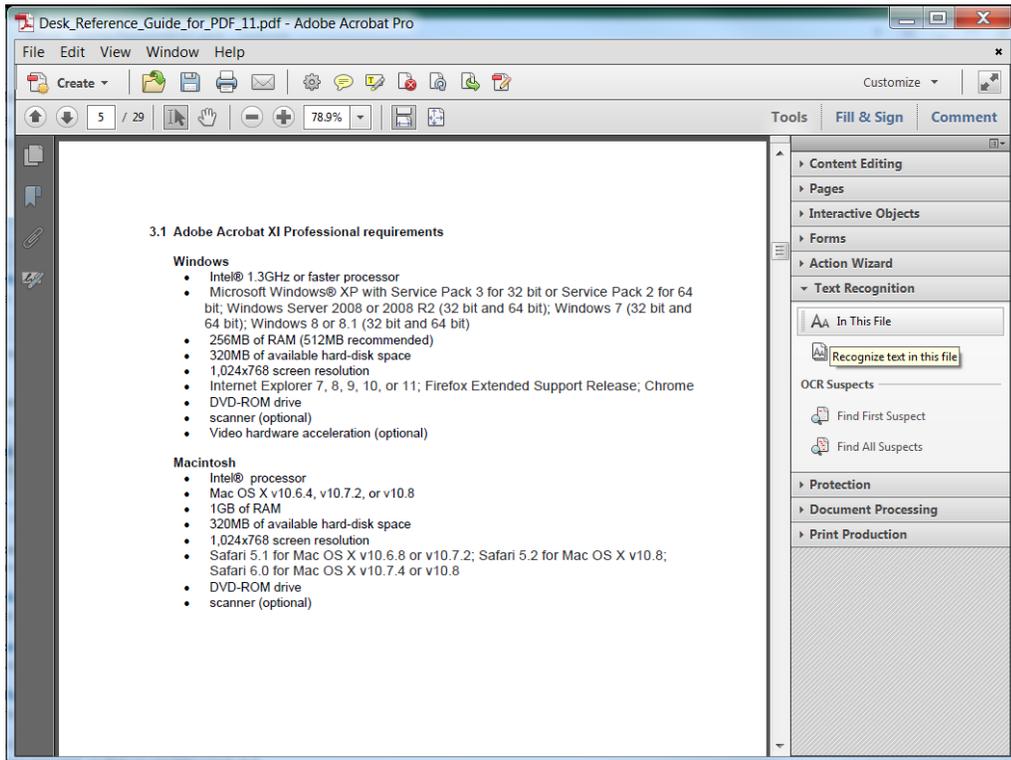
- From the main menu, select **Edit > Select All (Ctrl+A)** to select all the text on all pages. Another way is to click the **Select** button on the Tools menu and place the mouse cursor on the first character of the very first page. With the left-mouse button pressed, drag downward through the pages until you get the last character.

If the text is highlighted, it means that Optical Character Recognition (OCR) process ran correctly and that there is searchable text (hidden text). If, however, the **whole** page has a blue box, this means the OCR process has not been run (no searchable/hidden text), hence the OCR process needs to be run.

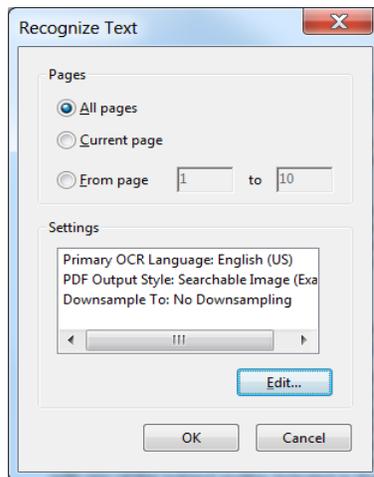


 A warning message will appear if OCR process has never been run. At this time, you have the option of running the OCR process. Click the **OK** button to start the OCR process. In the **Recognize Text** window, choose one of the options, i.e. **All pages/Current pages/From page x-x**.

- The OCR process may also be started manually by going to **Tools > Text Recognition > Aa In This File**



- In the **Recognize Text** window, verify that **PDF Output Style** is set for **“Searchable Image (Exact)”** and **Downsample** is set to **“No Downsampling”**



- Click **OK** to start the OCR process.

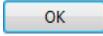
 After running OCR, Preflight will introduce an error of **“Fonts Not Embedded”**. This is normal and can be ignored since the error is on the scanned source image(s).

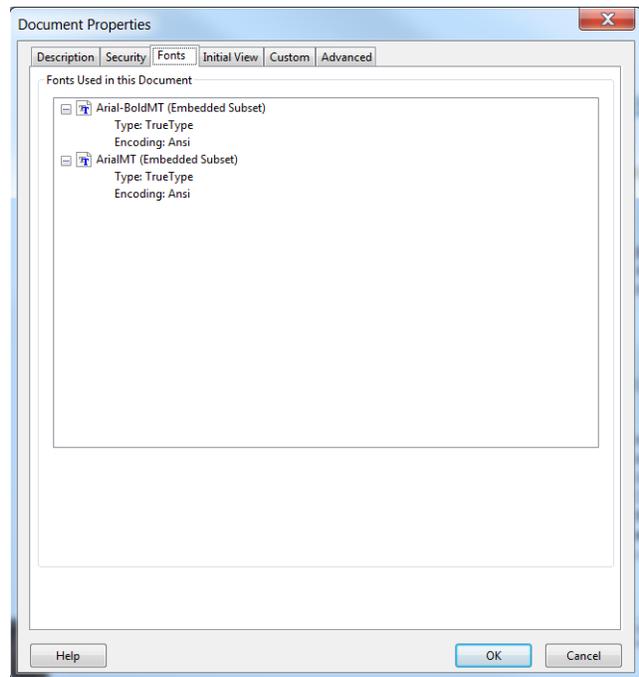
6.2 Embedded Fonts Verification



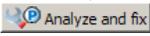
The “Fonts Not Embedded” error in Preflight is acceptable for scanned images that have been OCRed.

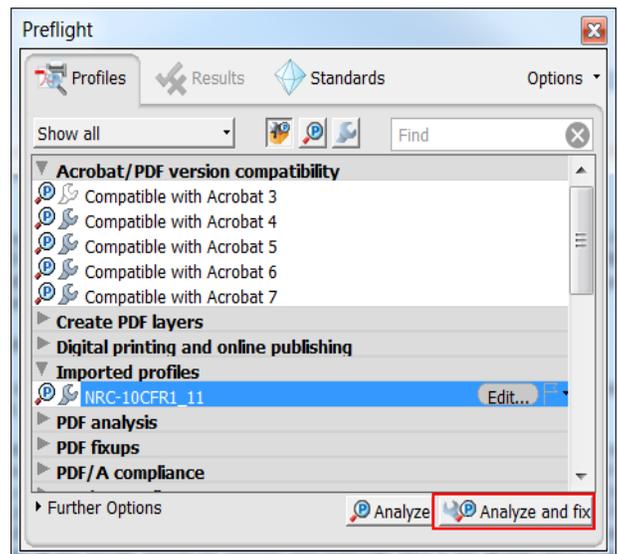
Verify that all Fonts are embedded in the document by taking the following steps:

- From the main menu, select **File > Properties** or press **Ctrl+D** to bring up the **Document Properties** window.
- Click the **Fonts** tab and verify that all fonts in the **‘Fonts Used in this Document section’** include “Embedded Subset” at the end. You can also run Preflight function and see if Preflight reports any errors relating to Embedded Fonts.
- Click  to close the **Document Properties** window.



If the fonts are not embedded, verify the Distiller Job Options used to generate the file has the correct settings. To correct the fonts not embedded issue, use one of the following three options...

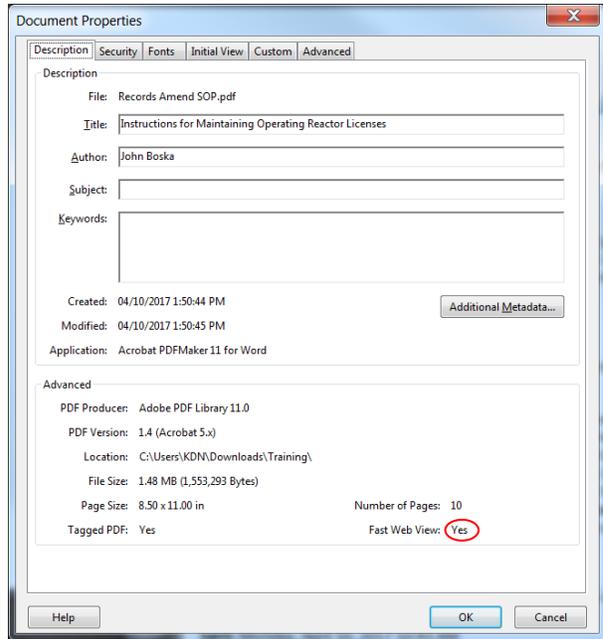
1. Open the document in its native application and re-PDF the document by following examples in the **“Desk Reference Guide for PDF Document Generations,”** i.e. “Create PDF” or “Print to PDF” method.
2. Print to PDF inside Acrobat XI Professional following the “Print to PDF” examples in the **“Desk Reference Guide for PDF Document Generations.”**
3. In Adobe Acrobat XI Pro, launch Preflight by going to **Tools > Print Production > Preflight**.
 - a) Select the NRC’s recommended Preflight Profile, NRC-10CFR1_11
 - b) Click on  to embed all the Fonts (will also Optimize Fast Web View at the same time).



6.3 Fast Web View.

Verify that Fast Web View is enabled by taking the following steps:

1. From the main menu, select **File > Document Properties** or press **Ctrl+D** to bring up the **Document Properties** window.
2. Under the **Description** tab, on the lower right corner, verify **Fast Web View** is set to 'Yes'. If not, enable it by selecting **File > SaveAs**, or by running one of the batch sequences from **Advance > Batch Processing (Advance > Document processing > Batch Processing)**, or just re-PDF the document.
3. Click **OK** to close **Document Properties** window.

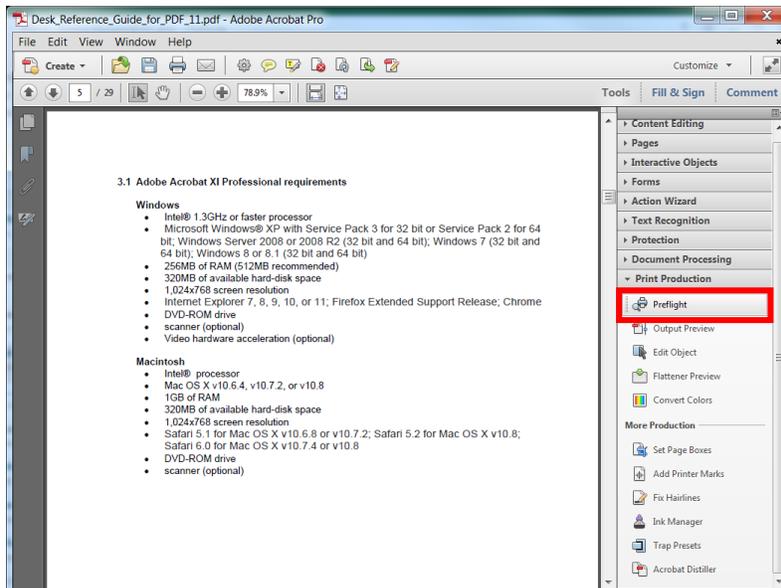


*Remember to perform **File > SaveAs** if changes are made to the document, because a typical **File > Save** will revert Fast Web View to "No".*

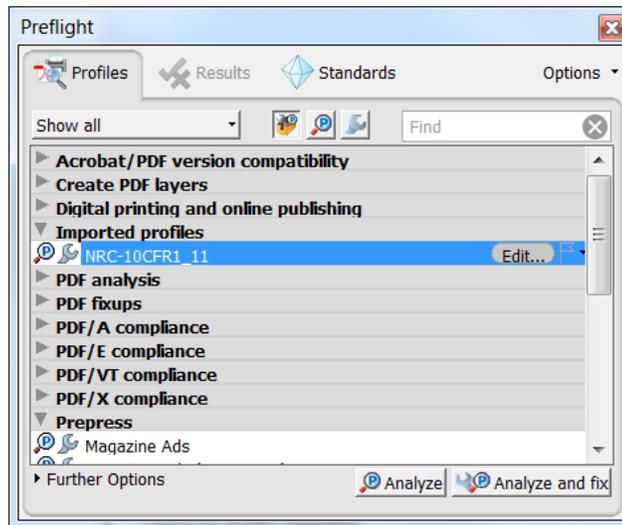
6.4 Preflight Error Tests on Adobe Acrobat XI Professional

Do a Preflight test for any errors before submitting the document to the NRC.

- Launch Adobe Acrobat XI Professional.
- Open a PDF document that you want to test for errors.
- From the main menu, click on **Tools** and select **Preflight**.



- In the Preflight window, select the correct profile for testing, i.e., NRC-10CFR1 11, under **Custom profiles** or **Imported profiles** if it was downloaded from <http://www.nrc.gov/site-help/electronic-sub-ref-mat.html>.



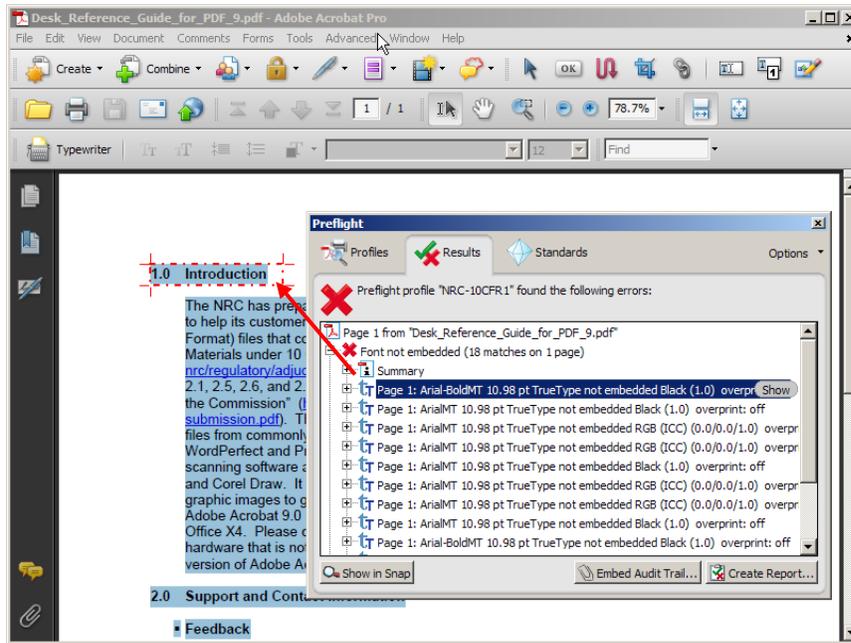
- Click on the  **Analyze** button to start checking the document for errors.



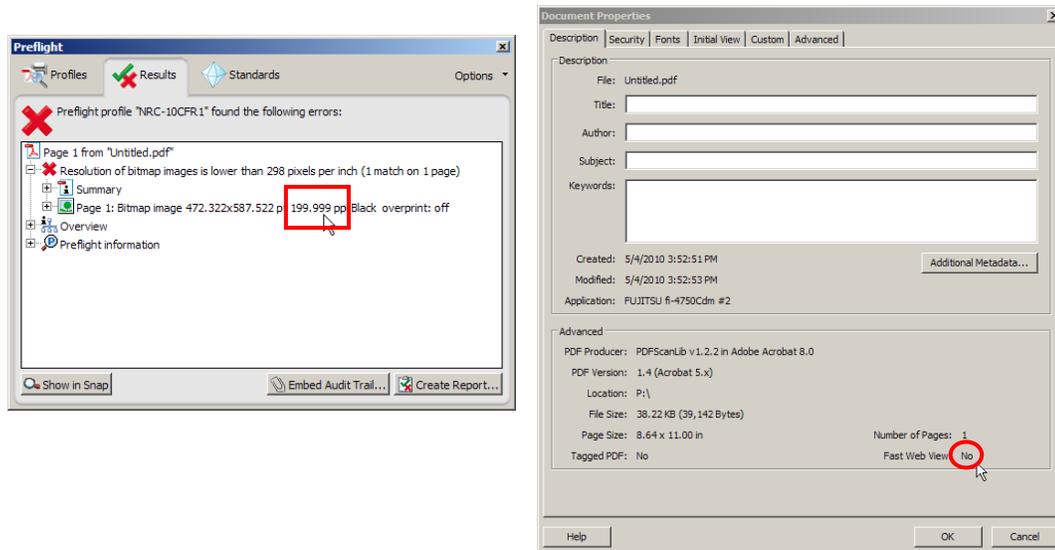
*In Adobe Acrobat XI Pro, when using the NRC's Preflight Profile, click on the  **Analyze and fix** button will 1) embed the Fonts, and 2) Optimize PDF for Fast Web View.*

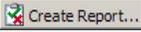
Below are some examples of Preflight errors:

- **Fonts not Embedded**



- **Less than 300dpi and NOT Fast Web View**



Click on  button if you want a PDF version of the results, or click on  to exit.

7.0 Miscellaneous

7.1 FAQ

1. *"I just scanned several images and converted into PDF. I ran Preflight and I received errors that my images were scanned at 299.99dpi, is this acceptable?"*

Yes 299.99dpi is acceptable due to round off.

2. *"Your guide has no information about scanners and the preferred method of scanning. Will you be adding instructions to support scanning?"*

No. There are too many different scanners with proprietary software. Submitters may use any scanners and scanning software with the resolution set to scan no less than 300dpi.

3. *"Where can I download a pre-configured Adobe Distiller PDF Settings (profile)? And how do I install it?"*

You can download a Adobe Distiller PDF Settings (profile) for your version of Adobe at <http://www.nrc.gov/site-help/electronic-sub-ref-mat.html> and place it in C:\Program Files\Adobe\Acrobat <x.0>\Distillr\Settings.

Follow these steps to add this new profile:

- Launch Acrobat Distiller (either from **Start/Program/Acrobat Distiller XI** or select **Tools/Print Production/Acrobat Distiller** inside Adobe Acrobat XI Professional).
 - The **Acrobat Distiller** window pops up. From the main menu, click on **Settings** and select **Add Adobe PDF Settings**.
 - An **Add Adobe PDF Settings** window pops up. Select the new profile you have downloaded (e.g. NRC-10CFR1 11.joboptions) and click on **Open**.
 - The **Acrobat Distiller** window reappears with the newly loaded profile as the **Default Settings**.
4. *"Do you have a pre-configured Adobe Preflight profile? If so, where can I download it and how do I install it?"*

You can download a pre-configured Adobe Preflight profile for your version of Adobe at <http://www.nrc.gov/site-help/electronic-sub-ref-mat.html> and place it in C:\Program Files\Adobe\Acrobat <x.0>\Distiller\Settings.

Follow these steps to install this new profile:

- Launch Adobe Acrobat XI Professional, and select **Tools/Preflight**.
- **Preflight** window pops up. click on **Options** and select **Import Preflight Profile....**
- In the **Import Preflight Profile** window, browse and select the downloaded Preflight profile (e.g. NRC-10CFR1 11.kfp), then click on **Open**.
- The imported profile will be listed under the **Imported profiles** section.

5. *"Is JPEG compression an acceptable alternative to ZIP compression?"*

At this time JPEG compression is an unacceptable alternative to ZIP compression because it is a lossy compression method.

7.2 Quick Links

<http://www.nrc.gov> - U.S. Nuclear Regulatory Commission home page.

<http://www.nrc.gov/site-help/e-submittals.html> - Electronic Submittals homepage.

<https://www.nrc.gov/docs/ML1303/ML13031A056.pdf> - Guidance for Electronic

Submissions to the Commission.

<https://www.nrc.gov/docs/ML1014/ML101440354.pdf> - PDF Document Submittal Checklist