

# Cal/EPA Suggested Guidelines for Digital Photos

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## **Advantages of Digital Photography**

There are many advantages to using digital photographs as opposed to traditional 35 mm film. Digital cameras produce instant images, allowing the photographer to view the images and instantaneously decide whether the photographs are adequate without the delay of waiting for the film and prints to be processed. Digital photography does not require outside developing or reproduction. Furthermore, digital photographs are easily stored, do not take up additional physical space and can be widely disseminated electronically with virtually no time delay. The concern is that the photos ultimately reproduced at trial or hearing could be subject to attack as having been altered. This has been rare, but to ensure the integrity of digital photos, the following steps are suggested.

## **Prior to taking the photos:**

- 1) Whenever possible, use the default settings for the camera. If you make any changes such as turning on red eye reduction, just note that in your log. Experienced photographers who need advanced settings should use and document them just as they would when using film.
- 2) Some recommend that if the default file format is JPEG or BMP, to change to TIFF for a more raw data format. This can reduce possible arguments about "compression" later.
- 3) Confirm date stamp is correctly set.

## **While taking photos:**

- 1) Do not delete or rearrange photos from the flash media card.
- 2) Do not alter any images - such as to change orientation or the file number, name, or date.
- 3) If taking photos for more than one inspection per flash card, consider shooting a photo of a placard at the beginning and ending of each case/site (perhaps a shot of the front of the business could be the first shot).

## **After the photos are taken:**

You need to preserve the original unaltered data that is stored in your camera's flashcard; this requires either storing the flashcard or downloading it onto your computer or other media. The key is to preserve this data in its original condition.

Keep notes or follow a standard protocol about how you handle your data from when it leaves the camera's flashcard to when you print it out. This is the chain of custody for this evidence.

If you download the photos onto your computer, make one file "read-only" (on that cannot be changed), this is your "master file" i.e. your new original. If it is

necessary to enhance photographs, the new image files created should be saved as new file names. The original file must not be replaced (overwritten) with a new file.

If it is necessary to change the contrast or touch up the photo, it is a simple matter to show the original and then so the altered photo and explain how the enhancement was done.

Some recommend downloading to a CD or DVD creation program. Copy all images directly from the flash card to a blank CD-R or DVD-R (not CD-RW or DVD-RW). Select the "finalize" option in the software. This CD/DVD is the "Master File". Mark the CD/DVD as such. Make at least one other copy for other uses (using the same procedure as above) and mark as duplicates. These duplicate files can be manipulated, if needed.