

Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Ron DeSantis
Governor

Scott A. Rivkees, MD
State Surgeon General

Vision: To be the **Healthiest State** in the Nation

MEMORANDUM

ACTION
DCEH 20-001

DATE: April 16, 2020

TO: County Health Department Directors/Administrators

ATTN: Environmental Health and Engineering Directors

THROUGH: Kendra F. Goff, PhD, DABT, CPM, CEHP, State Toxicologist and Chief
Bureau of Environmental Health

FROM: Ed Barranco, MPH, CEHP, CPM, Environmental Administrator
Bureau of Environmental Health, Onsite Sewage Programs

SUBJECT: Seals by Engineers-Physical and Digital Seals and Signatures

This memorandum provides guidance on how to accept seals by engineers licensed in Florida. It is based on regulations by the Florida Board of Professional Engineers (FBPE), Chapter 61G15 FAC, and examples received from engineers. It answers the following questions:

- What do seals look like?
- How can engineers' sealed documents be submitted to the department?
- How to verify digitally signed and sealed documents?
- How to process documents signed and sealed by engineers?

Each CHD environmental health office will have to evaluate and decide if it has the capacity to accept digitally signed and sealed documents. This will depend on the answers to these questions:

- Is your onsite sewage construction application and permitting process set up to accept documents electronically at all or under certain conditions? Digitally sealed documents will only be acceptable under the same conditions.
- Is your onsite sewage construction application and permitting process limited to documents of certain sizes (e.g., 11x17), such as by the size of your printer (e.g. to print field copies of site plans) or scanning facilities? Submitters of digitally sealed documents will need to create documents with these size limits. Larger documents will need to be submitted physically.

If your office decides to accept digitally signed and sealed documents, please provide your instructions based on the answers to the above questions to engineers or contractors who submit sealed documents to your county offices.

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Background

The Florida Department of Health's (Department) onsite sewage treatment and disposal program (OSTDS) requires engineers licensed in Florida to sign, date and seal (seal) all final engineering documents. Examples are Rules 64E-6.004(4), 64E-6.013(4)(e), and 64E-6.026(1), of the Florida Administrative Code (FAC). Currently, the environmental health program manual (DOHM 150-4), Section VI, Chapter K(D)(4) allows county health departments to utilize and accept electronic signatures that comply with Chapter 668, Part I, Florida Statutes (F.S.) Up to now, the Department had not implemented procedures to address electronic or digital sealing by engineers, therefore licensed engineers were always required to provide signed, sealed and dated physical or hardcopy originals.

In order to accept electronic or digital sealing, the agency needed to develop a policy how to do so in accordance with sections 668.001-668.006 and 471.025, F.S. This document provides such a policy for the onsite sewage program, subject to the capacity of the local offices to process electronic documents at all or up to certain sizes.

What do seals look like?

A sealed document contains the seal itself, a date and a signature. Florida's engineering regulations (Rule 61G15-23.002, FAC) require all forms of seals to be a minimum of 1-7/8 inches in diameter, contain the licensee's given name (abbreviations or initials of first names allowable), the licensee's number immediately preceded by the designation "No", the words "PROFESSIONAL ENGINEER" and the words "STATE OF FLORIDA." Rule 61G15-23.002, FAC, recognizes three forms of seals summarized here:

- Wet Seal: a seal physically applied to a printed document capable of leaving a permanent ink representation or other form of opaque permanent impression



- Embossing Seals: a seal physically applied to a printed document capable of leaving a permanent crimped representation, or other form of permanent raised impression on the printed document.
- Digitally Created Seals: any seal created as part of the document and not physically applied that is an opaque permanent representation of a seal. Note that some digitally signed and sealed documents do not contain an image of a seal (see below).

Physically signed and sealed documents will have an original of the licensee's signature by hand, and the seal (wet, embossing, or digitally created) will partially overlap the signature without rendering it illegible (Rule 61G15-23.003, FAC).

For digitally signed and sealed documents, the image of a seal is optional. One of the two formats of seals and text as depicted below must be used. While the formatting may be altered, the text must remain identical (Rule 61G15-23.004(3)(d), FAC). The text is from the December 2019 rule. The 2016 rule required the first part of the text to be: "This item has been electronically signed and sealed by

[Name], PE, on [Date] using a Digital Signature.” You will see the language in the top box if the engineer DOES use an image of their seal and the language in the second box if the engineer DOES NOT use an image of their seal.



This item has been digitally signed and sealed by [NAME] on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

[NAME], State of Florida, Professional Engineer, License No. [NUMBER]

This item has been digitally signed and sealed by [NAME] on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

There is a method of electronically sealing document that includes a “signature report” and a list of authentication codes of the electronically sealed documents (Rule 61G15-23.005, FAC). The department does not accept this method at the current time.

Some county offices and building departments have used “signature affidavits”, a physically printed and physically sealed and submitted letter that contains an illustration of how the digital seal is going to look like. While you may see them, our current understanding is that this is not required by engineering rules.

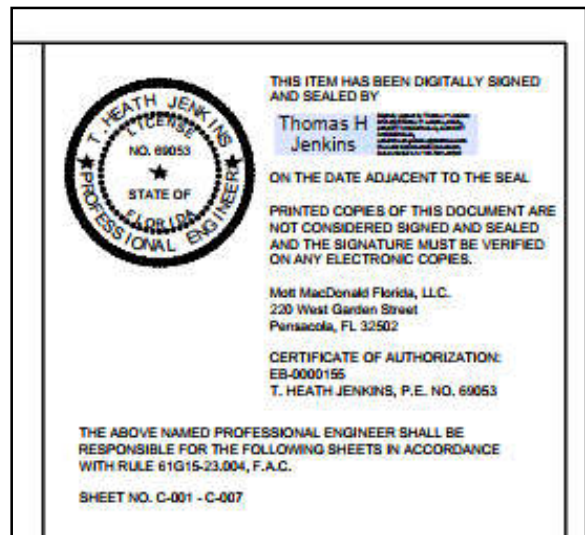
How can engineer’s sealed documents be submitted to the department?

An engineer has two ways to transmit sealed documents to the department: Originals of physically sealed documents (with original signature, and date, and wet or embossed seal), or, if the office is capable of doing this, electronically, by transmitting digitally signed and sealed documents (generally as email). More details on this is below based on Rule 61G15-23.005(4), FAC).

How to verify digitally signed and sealed documents?

The language shown inside of the digital signature box (the required language from the rule) should be placed on the document where an original signature would appear if the item were being physically signed, dated and sealed (see Rule 61G15-23.004(3)(c), FAC).

The image to the right shows an example:
A verification step for all seals is to check if the



engineer's license is valid. This can be checked at www.myfloricalicense.com/DBPR by selecting the "verify a license" option.

The following are verification steps to take for digitally signed and sealed documents by engineers (see check list). The digital signature verification steps are based on the Department's standard software, Foxit Reader and Foxit Phantom:

Verification Steps for Digital Seals:

1. Need to have the prescribed text by Rule 61G15-23.005(4)(d), FAC:
Look at and around the seal.
2. Document must be printable:
In the document viewer, check file/properties:
Printing: allowed; Commenting must be allowed for you to make comments on it.
You can use the digitally signed and sealed documents as review work copies where you make notes and point out deficiencies. If you plan to do that without breaking the digital seal, retain the original of the document as received by the agency. You can save a work copy as a different file and "mark-up" digitally signed documents during plan review.
3. Verify the digital signature by checking several properties of it:
To look at digital signature, click on signature element. This brings up a window "Signature Validation Status". If the signature has not been previously recognized as trusted on your computer, the Status will show as "UNKNOWN". That is ok.
 - a. Confirm that the document has not been modified since the signature was applied
To do this, click on signature properties and look for "validity summary", which states if the document has been changed. If you stamp anything on the document, it has changed.
 - b. Name and email match that on the signature (look in "signed by")
 - c. Signature was validated as of the signing time (look in "validity summary")
 - d. Check if the certificate was valid at the time of signing
To do this, click on show certificate, and again on show certificate. You will be on the "general" tab. This provides general information on the certificate. The certificate indicates if the signing date is inside or outside the "valid from... to..." validity range of the certificate.
 - e. Click on "Details" tab to see more details on the certificate, can confirm validity date range
Signature hash is at least SHA1, SHA256 is also common

Check List

Item	What to look for	Check
All seals: is it sealed?	Seal with name, date, "State of Florida", "Professional Engineer" "No.", license number, signature	
Is the engineer's license valid?	Look up at www.myfloridalicense.com/DBPR and select the "verify a license" option	
Digitally signed seals:		
Does it say it is digitally signed and sealed?	"This item has been digitally signed and sealed by [NAME] on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies."	
Is document printable and comment able?	File/Properties: printable, comment able (if you plan to comment on the document, save original for the record)	
Is digital signature valid?	Signature validation status: document not changed since signed	
	->Signature properties: name and email match that on the signature	
	->Signature properties: signature was validated as of the signing time	
	->Show certificate->show certificate->general tab: date of signing falls within the validity range	
	->Show certificate->show certificate-> detail tab: Signature hash is at least SHA1, note that SHA256 is also common.	

How to process documents signed and sealed by engineers?

Each CHD environmental health office already has procedures in place for physically signed and sealed documents. For digitally signed and sealed documents, each office's process might currently vary in how much of the review and permitting process occurs on paper printouts vs. on computer and keeping the seal intact. So, the office needs to document that there was a digitally signed and sealed document received. The following table illustrates the parallel procedures of system construction application review.

Step	Physically signed and sealed document	Digitally signed and sealed document (PDF-format)
Receiving	Front desk or by mail	By email with attachment
Timestamp in	Date-stamp document, forward for review	Forward email to review
Check seal		Annotate with: "This document was received sealed on [date]. [Date], [Name]"
Review and comment	Make comments (e.g. add auger boring locations) on that copy to use as site plan, and date and initial annotations	Make comments and date and initial annotations. Option: print to use for site evaluation if that is done by CHD
Disapprove plan or request additional information, deny (as applicable)	Mark "disapproved" on site plan or "void" on other documents, with reviewer signature and date, keep separate from other application documents	Mark "disapproved" on site plan or "void" on other documents, with reviewer name and date
Approve Plan (intermediate step)	Mark "This plan was approved on [date] by [name] [CHD]"	Comment "This plan was approved on [date] by [name] [CHD]"
Issue Permit		Print field copy of approved plan (ensure scale)
Archive	Scan documents, archive physically	Combine previously sealed documents with approval annotations for archive