

EEDMS QA/QC Process Office of Environmental Management

1. PURPOSE:

To begin using the Florida Department of Transportation's (FDOT's) Enterprise Electronic Document Management System (EEDMS), paper documents must be converted to electronic documents and properly attributed (indexed) before archiving them. Documents already in electronic format only need to be attributed before importing them into the EEDMS library.

The purpose of this document is to establish the procedure/protocol to follow when scanning paper records (documents) or importing electronic records (documents) into the EEDMS, and to ensure in the process those records are legible, complete, properly indexed/archived, and retrievable.

This procedure is in compliance with the FDOT's Directive, Topic 325-080-003-b.

This document focuses on and describes the Quality Assurance (QA)/Quality Control (QC) processes for successfully scanning and archiving paper documents into the Office of Environmental Management Office (OEM) EEDMS database.

2. DEFINITIONS:

The following paragraphs loosely define some terms which will be used throughout this document and are not meant to replace any official or already approved definitions of terms, Groups and Roles developed for the EEDMS and completely described in other documents.

Pre-Archive:

The Pre-Archive is a collection of documents which have been scanned and indexed but not yet published. Documents and document Profile forms (index attributes for a document) placed in the EEDMS in pre-archived state can be modified or deleted by user groups with appropriate document rights. Documents in the pre-archived state are not considered FDOT Official Records.

Archive:

The Archive is the collection of scanned documents which have been through QA/QC, approved for publication, and published by authorized user groups. Selecting to publish a document to the Archive will change a document's security rights, preventing any future editing or deletion. This change assures the authenticity of a document, making it an FDOT Official Record. Only specific user groups have the right to publish to the Archive.

Document Receptor/Owner:

The Document Receptor/Owner is the individual, group or Section within FDOT which receives or possesses a document which might require archiving in the EEDMS.

Index Operator (INDEXOP):

The Index Operator is the user responsible for attributing/indexing and uploading the documents into the EEDMS library. The INDEXOP is the primary scan operator and the person in charge of importing electronic documents into the EEDMS application.

Technical Support Group:

This is the Information Technology (IT) group responsible for providing technical support, problem resolution and technical guidance for the hardware and software associated with the process described in this document.

Quality Control Reviewer (QCRVR):

The Quality Control Reviewer is the user responsible for ensuring the quality of the scanned or imported documents in the EEDMS as submitted by the INDEXOP. The QCRVR has basically the same document rights as an INDEXOP, with the additional capability and responsibility to publish the pre-archived documents to the Archive or delete the document from the pre-archive if it does not pass quality control. The QCRVR can also edit attributes of documents already in the Archive, if it is necessary.

Retention Manager (RTNMGR):

The Retention Manager has the most responsibility in the EEDMS application. The RTNMGR is entrusted with full rights to all documents in the EEDMS Archive, including delete document rights. If after archiving, a change to a document is absolutely necessary, for instance adding a page or removing the document completely so it can be re-scanned correctly, the RTNMGR would be the only user with the capability of performing such functions on archived documents. The RTNMGR is considered the Records Manager for the EEDMS and as such must be trusted to uphold the integrity of the FDOT EEDMS library by ensuring the authenticity of the records and the removal and destruction of the documents in accordance with FDOT procedures and policies, when the retention period has expired.

Application Coordinator (APPCORD):

The Application Coordinator has the overall responsibility for the authenticity, accuracy and integrity of the documents in the EEDMS Archive. The APPCORD also controls access to the documents stored in the Archive. Ultimately, the APPCORD has the responsibility of ensuring the processes and procedures outlined in this document are followed.

Document User (DOCSUSER):

The Document Users are the universal users found in all Business Areas. They are considered “read-only” users because they can never perform document functions which will alter the state of a document. They cannot create, import, modify or delete documents. They only have rights to view, print, e-mail and download a copy of a document in the EEDMS library from any Business Area. Anyone who will require access to the documents in the EEDMS must at least have this account.

Prior to beginning the archiving process, the following should be reviewed and understood by the APPCORD, RTNMGR, as well as QCRVR and the INDEXOP:

- The APPCORD is the owner of the Attribution Standards and will make additions, changes or corrections as necessary.
- All the documents to be archived are to be properly identified and the ownership established.
- All documents saved in the EEDMS are to be stored using PDF, JPEG or the TIFF Group 4 file format, which are the approved long-term storage formats.
- Paper documents must be scanned at 300 dpi or greater to satisfy Florida Department of State (FDOS) and FDOT storage requirements. The scanner should have the latest scanner drivers installed, and the scanner driver must be selected as a TWAIN or ISIS driver.
- All paper documents will be stamped with the word “SCANNED” before scanning the document into the Hummingbird/e-Docs imaging application.
- Scanned documents are entered in the EEDMS as soon as they are saved by the INDEXOP user in the imaging application.
- Files stored in the EEDMS are accessible by all authorized FDOT users (DOCSUSERS) with valid FDOT user IDs. Access is granted for viewing, printing, emailing or copying the documents.
- The lead financial number will always be the preferred financial number to be used for attributing documents. But if the project or program requires it, multiple financial ID numbers can be assigned and stored with the documents as part of their attributes.
- It is FDOT’s intent that once records have been scanned and record destruction requirements have been met, a request to destroy the paper records will be submitted using Form No. 050-020-06, Records Disposition Request.
- The disposal of project documents cannot be made until **AFTER** the project is paid off and a quality control check is performed to verify all documents have been properly scanned into the imaging application.

3. IDENTIFYING DOCUMENTS (Document Receptor/Owner)

The Document Receptor/Owner, or the appointed individual, is responsible for evaluating their inventory of records, making the determination as to what

records should be uploaded into the EEDMS, assigning each record to the appropriate group and type, and providing attribute guidance to the INDEXOP.

Prior to entering the record in the EEDMS, the record must be evaluated to determine whether the record is eligible for inclusion in the EEDMS as an FDOT Official Record.

An evaluation of the record is made for the following reasons:

1. To establish its real value (see Appendix A: "Considerations For Establishing the Value of a Record")
2. To determine the length of time the record will be retained
3. To identify those records which have no further value and can be processed for disposal

An evaluation must include these general considerations:

- a. Is the record an FDOT property?
- b. Is the record an Environmental Management Office (EMO) record?
- c. Does the record belong in the Central Office?
- d. Is the record vital to the organization?
- e. Is the record needed for administrative reasons, such as to establish an audit trail, document fiscal activities, or for legal purposes?
- f. Is the record needed for archival or historical purposes?
- g. Is the record needed for research and/or statistical purposes?
- h. Is the record of general public interest or does it have national impact?
- i. Is the record of further value to anyone?

Once a record has been deemed eligible to be entered in the EEDMS, and to make it easier for the Index Operator, it is recommended to separate and stack the records into different groups, using the approved OEM groups. It is also recommended to keep all the records which are logically related together. For example, place all the records relating to a given Financial ID # or program/project in the same stack. If the document is found not eligible, then the Document Owner may choose to keep it, or circulate it if it is of interest to somebody else.

At this point, a decision has to be made about what to do with all the duplicates and draft copies found during this process. It is the responsibility of the Document Owner to determine, depending on their value, if the duplicate documents are to be kept or not and to verify the final version documents have been properly scanned into the imaging application before disposing of the draft copies.

4. SCANNING/IMPORTING AND INDEXING (INDEXOP)

There are two types of records the INDEXOP might be receiving for pre-archiving (electronic and paper). Electronic documents are to be imported and attributed as soon as received. The paper record must be converted to an appropriate electronic format using an approved EEDMS scanner. Before the scanning begins, the INDEXOP has to make sure the paper documents are ready for this process. If it has not been done already, and in order to achieve the best possible image quality of the records to be scanned, the INDEXOP will have to prepare the documents by performing one or several of the following actions:

- Remove paper clips, staples, post-it-notes or anything which could interfere with the action of an automatic document feeder.
- Separate out the documents which could jam or confuse an automatic document feeder (For example, documents with torn or crumpled pages) and documents containing different paper sizes (These need to be set aside and processed individually).
- Place a blank or colored sheet of paper between documents in a stack. This will make it simpler to identify separate documents when processing a large stack.
- Limit a given stack of documents to one paper size.

Once the document is ready for scanning, the word “SCANNED” must be placed either on its cover or its first page, with a label, stamp, or some other tag/mark, such that it will appear on the electronic scanned document to identify it as being a scanned paper document. This identifier will allow users to recognize documents printed or e-mailed from the EEDMS system as having already been scanned and archived, as well as distinguish between original paper documents which will or will not be archived.

4.1 Initial Testing (the Test Document):

The scanning/importing process may be done on a daily or weekly basis as mail comes into the office, or may be done whenever a project is complete or a decision has been made to archive completed portions of a project.

At the beginning of each scanning/importing day, the first document scanned and/or imported will be considered a test document. The image of the test document will be viewed on the computer screen and compared with the original document. The on-screen image is to be viewed at a 1:1 ratio in order to avoid reduced resolution and windowed images. The INDEXOP has to make sure the image of the scanned/imported test document is legible and complete; and all the pages are straight, oriented in the same direction, and of the proper size. If this is not the case, the software settings must be checked and verified and the entire document, or the specific pages, must be rescanned until the test document is legible and complete. If an acceptable scanned image cannot be obtained, then it must be assumed the scanner is not working properly and must be reported (to

the Technical Support Group), to be checked, calibrated and repaired if necessary.

After getting a satisfactory image, the test document must be printed and the printed output reviewed for legibility. The print quality must be good enough so it does not produce any image distortion such as wavy lines, dark or light spots, or misalignment. This printed copy will be compared to the test image on the screen. If the printed copy is not acceptable, it must be assumed the printer is not working properly and must be reported (to the Technical Support Group), to be checked and repaired if necessary.

If the printed output is legible and complete, then the test document must be attributed, checked for public exemption, pre-archived (saved) in the OEM EEDMS, and made ready for the QCRVR.

This initial testing will be repeated until acceptable results are achieved. If the testing is not successful, it must be assumed another component is not working properly, and additional corrective maintenance must be performed until the problem is identified and corrected.

IMPORTANT: A test document must be scanned, printed, and subjected to the above testing every time after any of the following occurrences:

- Maintenance or repairs have been performed on any equipment used to scan.
- The scanner has been recalibrated for any reason.
- The scanner hardware or software settings have been changed.

4.2 Initial QA/QC (Document Legibility and Completeness):

After successfully completing the Initial Testing, the daily production scanning/importing, Initial QA/QC, attributing and pre-archiving process may continue its normal routine until the last document has been pre-archived (saved) in the OEM EEDMS or the scanning/importing day has come to an end.

The INDEXOP performs the initial QA/QC by checking all the subsequent daily scanned/imported documents to make sure their images are legible and complete; and all the pages are straight, oriented in the same direction, and of the proper size. If this is not the case, the document, or specific pages, must be rescanned until the document is legible and complete. Otherwise, the documents are attributed, checked for public exemption, pre-archived (saved) in the OEM EEDMS, and made ready for the QCRVR.

If the original documents or pages are illegible, the words **“ILLEGIBLE ORIGINAL”** must be stamped or hand written on the cover or first page of the document if the entire document is illegible or on the specific eligible original pages to be scanned, and the document then can be attributed, checked for

public exemption, pre-archived (saved) in the OEM EEDMS, and made ready for the QCRVR.

At the end of the scanning/importing day, after the last document is scanned/imported, or at a predefined point in time (based on the workload, etc.), the INDEXOP must initiate the paper record disposition process by filling out the Records Disposition Request Form (Form 050-020-06), attaching a list of the scanned paper records to be destroyed (the EEDMS Group can generate a report listing all the documents added to the EEDMS at any specific period – for example, per INDEXOP from date X to date Y – and it can be attached to the form as the record of which paper documents are being destroyed), and sending it to the QCRVR to be approved. The INDEXOP can decide how often to send it and how many and which documents to include in an individual disposition request.

5. QUALITY ASSURANCE/QUALITY CONTROL AND ARCHIVING (QCRVR)

The QA/QC procedure for the scanned document, ready for the Archive, is a two-tiered process. There is the Initial QA/QC already performed by the INDEXOP (explained above) and the Final QA/QC performed by the QCRVR as described in the paragraphs below. This process must occur prior to publishing a document to the Archive.

5.1 Final QA/QC (Document Retrievability)

After retrieving the documents which are in the pre-archived state, the QCRVR performs the Final QA/QC by reviewing the document's attributes to make sure they are free of typographical errors, they match the document Group and Type per the Attribution Standards, and they are filled out as completely as possible. If this is not the case, the QCRVR can modify the existing attributes or add new ones if needed. The QCRVR should conduct a spot check of the scanned documents to verify the quality is acceptable. Finally, the QCRVR should verify the documents are retrievable by performing a controlled and random search of one or several documents known to be in the system in pre-archived state. Once the Final QA/QC is completed, documents are published to the Archive.

If the results of the Final QA/QC task identify a document which did not comply with the scanning/importing requirements (legible, complete and retrievable), the QCRVR must record the problem and submit a request to the INDEXOP to rescan or re-import the specific document or the relevant pages of the document so it can go through the same process and be reviewed again. The defective electronic record must be deleted.

NOTE: The QCRVR must follow the Testing and Sampling Methodology described in Appendix B, "Testing and Sampling Methodology."

Once all the records/documents have been published to the Archive, the QCRVR must have the Records Disposition Request Form (Form 050-020-06) signed, approved and delivered to the RTNMGR for the proper disposal/destruction of the paper records. The request must be signed by the QCRVR and the Office Manager, and item “d” in block 6 must be checked to indicate the records were electronically stored and the paper copy will be destroyed.

6. RETENTION MANAGEMENT AND DESTRUCTION OF PAPER ORIGINALS (RTNMGR)

6.1 Destruction of Paper Originals

Once a document or group of documents has been scanned into the EEDMS and a Records Disposition Request Form (Form 050-020-06) has been received, the RTNMGR must perform a final quality control review to make sure the project or contract has been paid off and all the documents have been properly scanned into the imaging application, before the Records Disposition Request Form (Form 050-020-06) is completed and the original paper documents can be destroyed.

6.2 Review of EEDMS Documents Which Have Passed Their Retention Period

As EEDMS documents begin meeting retention periods, a list will be generated with the documents becoming eligible for deletion. Each RTNMGR, in coordination with the APPCORD, will be responsible for determining which documents should actually be deleted and which documents might need to be kept for a longer period of time. For documents eligible for deletion, a Records Disposition Request Form (Form 050-020-06) must be filled out to allow the deletion of the electronic files. Item “a” in block 6, must be checked to indicate the records are being deleted. For items requiring longer retention, coordination with the EEDMS Group is necessary to determine if the files can be maintained on the EEDMS server or if they need to be stored on other media such as CDs or DVDs.

6.3 Deletion of Published Documents

The RTNMGR has the ability to delete files which have been published to the Archive. This ability should **ONLY** be used if after been published to the Archive, a document is determined to have been improperly scanned or if the document retention period has expired. Prior to publishing, the document can be modified as needed. After publishing, the attributes associated with the document can still be modified by the QCRVR, the APPCORD or the RTNMGR, if necessary.

This system is not intended to house temporary or working files on a short-term basis, which might require frequent or large volumes of deletion from the system. Document deletion from the system should be a rare occurrence, and has to be approved by the APPCORD and the RTNMGR. Should an unusual circumstance arise requiring an unusual amount of deletions, the RTNMGR should coordinate with the APPCORD and the EEDMS Group if necessary.

APPENDIX A

CONSIDERATIONS FOR ESTABLISHING THE VALUE OF A RECORD

The legal, fiscal, archival, and administrative values of records have to be reviewed in order to establish the real value of a particular record. Considerations regarding these values include the following:

(A) LEGAL VALUE: The usefulness or significance of records to document and protect the rights and interests of an individual or organization; to provide for defense in litigation; to demonstrate compliance with laws and with state or federal provisions, statutes, and regulations; or to meet other legal needs.

(B) FISCAL VALUE: The usefulness or significance of records containing financial information necessary to conduct current or future business or serves as evidence of financial transactions such as budgets, payrolls, or vouchers.

(C) ARCHIVAL VALUE: A value which justifies the permanent preservation of records; also called historical, permanent, or enduring value. Some records are important not only for today's researcher, but for researchers years from now, such as historical information regarding a major state project.

(D) ADMINISTRATIVE VALUE: The administrative value of a record exists when the record continues to support the FDOT's current or future work.

APPENDIX B

TESTING AND SAMPLING METHODOLOGY

The table below outlines the minimum percentage of documents required to go through each check when:

- A new scanner operator initially begins archiving in the EEDMS
- A new scanner operator has become proficient at archiving in the EEDMS
- A scanner operator identifies a problem area

The APPCORD may change the required minimum percentage of documents and/or the duration for a certain percentage of documents going through the Final QA/QC. It is the responsibility of the APPCORD to relay the level of QA/QC required to the QCRVR if different from the minimum.

When a Section initially begins archiving in the EEDMS, the following gradual “step down” schedule should be employed:

	Percentage of Documents	Percent Accuracy	Duration
Initial QA/QC	100	100	Continual basis
Final QA/QC*	100	100	1 Month
	50	100	1 Month
	25	100	1 Month
	15	100	1 Month
	10	100	Continual basis

* If the Section is scanning between 50 and 100 documents/week, the duration should be 2 months for each “step down” in percentage of documents. If a section is scanning less than 50 documents/week, the Final QA/QC should be performed on 100% of the documents with 100% accuracy on a continual basis.

When a Section becomes proficient at archiving (i.e. has gone through all the steps in the table above), the Initial QA/QC will remain at 100% and the Final QA/QC will remain at 10%.

The items reviewed must be documented along with any modifications made to the EEDMS profile page during the review.

Problem Resolution Process

If a problem is identified (e.g., a document is not retrievable), either during the initial “step down” or once proficiency is met, the Section should immediately work to correct the problem, whether it is with the software, hardware or QA/QC process. Once the problem is solved and normal archiving procedures resume, the Section should “step up” to the next higher or more stringent percentage of documents which must be checked for the specified amount of time. For

example, if the Section was at a 15% check when a problem was encountered, the Section would then revert to a 25% check for the duration of 1 month, and then resume the “step down” to the minimum level.