DAQ-014-002.5: Quality Assurance Project Plan
And Standard Operating Procedure
Tracking Database Procedure

Revision 0

Effective Date: December 1st, 2020
I certify that I have read and approve of the contents of the Quality Assurance Project Plan (QAPP) and Standard Operating Procedure (SOP) Tracking Database Procedure with an effective date of December 1st, 2020.

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2.0 Scope and Purpose

In 2019, it was identified that a system was needed to track the progress of QAPPs and SOPs in the approval and review processes. With the growing number of documents being developed and the scope of the North Carolina Division of Air Quality’s (NC DAQ) monitoring network, it is paramount that these documents are approved and reviewed in a timely manner. Every level of the monitoring network is dependent on these documents being available and accurate.

To this end, the QAPP and SOP Tracking Database was developed to aid the central office. The goals of the QAPP and SOP Tracking Database are to help staff identify documents needing to be reviewed, to generate status reports for PPB management, and to provide an overview of changes that are required of a reviewed document.

For this system to succeed, it is important that each member of the Projects and Procedures Branch (PPB) staff use the QAPP and SOP Tracking Database in a consistent and timely manner. This SOP is to establish procedures that PPB staff will use to update, remove obsolete records, and generate reports.
3.0 Software Requirements

The significant Software required for the NC DAQ QAPP and SOP Tracking Database include:

- Windows Operating System
- Microsoft Office Suite (with access to Microsoft SharePoint)
- An Internet Browser
- Microsoft Access 2016
4.0 Locating, Checking Out, and Checking In the QAPP And SOP Tracking Database

The QAPP and SOP Tracking Database is located online, and users will need access to Microsoft’s SharePoint. Microsoft ended web support for Access as of 2018. This means that on SharePoint, clicking on the Access file will not open the file like other Office programs such as Word, Excel, etc. What SharePoint will do instead is treat the file as a downloadable file that can be reuploaded and replaced on the SharePoint site.

To prevent a user from overriding another user’s work, SharePoint has a file check out/check in system that will be utilized.

While checked out, only the user that has checked out the file can reupload the file. Others can view/download the QAPP And SOP Tracking Database, but another user cannot reupload while the file is checked out.

It is possible to download/reupload without checking out, but to ensure that no user loses work from a file being overwritten, it is important to always check out the QAPP And SOP Tracking Database if you are going to add to or edit the database. No matter if you are just viewing the database or editing it, the user should delete the file from your computer to prevent the user from inadvertently uploading an older file when database activities are finished.

Due to the frequent updates to SharePoint, the following instructions should be considered as a general guideline. Some windows or steps may be slightly different in appearance depending on updates from Microsoft.

4.1 Locating the QAPP And SOP Tracking Database

To locate the file:

1. Open your internet browser and log on to your Microsoft Account
2. Select the SharePoint Icon
3. Select the ‘NCDAQ Ambient Monitoring’ page
4. Scroll down a little on the page and select ‘Quality Assurance Project Plans’ link on the right of the page under the Ongoing Monitoring Activities header
5. Scroll down a little on the page and find the file named ‘QAPP And SOP Tracking Database’ link on the right of the page under the General QAPP Information header

Note: Older Revisions of the QAPP And SOP Tracking Database can be found in the same section under the General QAPP Information section. Only Revisions that had major structural changes will be stored this way and will be marked with ‘[Obsolete EF: YYYYMMDD]’ at the beginning of the file name where YYYYMMDD is the date that the file was obsoleted.
4.2 Checking Out Procedures

1. Find the Access file on SharePoint, right click or select the three vertical dots beside the file’s name, go to ‘More,’ and select ‘check out’.

2. A Box will appear stating “Checked out 1 item. Done” with the file’s name. A small white arrow inside a red circle will be beside the file’s name to show it is checked out.

3. Click on the file’s link. Download the file. It is recommended that it is downloaded to the user’s desktop.

4. Open the file and use database as normal.

4.3 Checking In Procedures

1. When the user has finished with the file, return to the SharePoint site page where the file is stored, select the three horizontal dots beside ‘New’, select ‘Upload’, and select ‘Files’.
2. In the Window that opens, navigate to the database downloaded on the computer, and select Open. The file must have the same name as what is listed on the SharePoint site, or SharePoint will treat the uploaded file as something new.

3. Momentarily, there will be a message stating that the file is being uploaded. Then a window will appear stating that the file was not uploaded but asks if you would like to replace the file on SharePoint. Select ‘Replace’.

4. To finish the process, Find the Access file on SharePoint, right click or select the three vertical dots beside the file’s name, go to ‘More,’ and select ‘check in’.
6. Download the file once more to ensure that SharePoint has saved the file. If the changes were not uploaded to SharePoint, see Appendix A.

The file is now ready to be checked out and changed by someone else. **Delete all copies of the database off the computer used** so as to limit confusion over the next time the QAPP And SOP Tracking Database is downloaded.
5.0 Using the QAPP And SOP Tracking Database

The QAPP And SOP Tracking Database uses a navigation panel where different topic matters are on the tabs along the top and options given for that given topic are located on the left of the database. Reports and Forms to fill out will appear in the sub-window of the database.

In the various tabs, the colors of the buttons on the right may be dark blue, green, or red. Dark blue buttons show a report in the sub-window, green buttons bring the user back to the same sub-window as when the tab along the top was selected, and red buttons perform an action on the data in the database.

**Note:** Red Buttons will always give a warning pop up to ensure that the user will want to perform that action.

To prevent a user from inadvertently changing the database’s functions, many of Access 2016’s functions have been locked. If a database needs to be changed, the database’s controller should be contacted.

When the QAPP And SOP Tracking Database is Opened, a Main Menu screen will appear as seen below.

5.1 Adding a new QAPP or SOP Record

1. From the Main Menu, select the relevant tab along the top of the database (QAPP or SOP).
2. In the top right of the sub-window, select the new record button.
3. Fill out all available fields in the sub-window. If the document has not been assigned a Document ID, see Appendix B.

4. If the document is located online, the user should paste the link to that file. Some possible ways to achieve this objective are as follows:
   a. If the document is located on SharePoint (While the PPB is collectively working on the document)
      i. Log on to SharePoint
      ii. Find the file’s location
      iii. Right click on the file’s name and select ‘Copy Link’.
iv. A Popup window will appear with the file’s web address. Select ‘Copy’ and close the popup window.

v. Paste the link into the appropriate field in the QAPP and SOP Tracking Database.

b. If located on Microsoft Teams (If being shared with the Regional Offices)
i. Sign on to Microsoft Teams

ii. Select the ‘Teams’ button on the right of the window

iii. Select find the team’s name under the user’s list of teams that the file is located under

iv. Select ‘File’ at the top of the screen and find that file’s location.

v. Right click on the file’s name and select ‘Copy Link’.
vi. A Popup window will appear with the web address of the file. Select 'Copy' and close the popup window.

vii. Paste the link into the appropriate field in the QAPP and SOP Tracking Database.

c. If located on DEQ Website (After the document has been reviewed and signed)
i. Locate the QA Documents page on the DAQ website

ii. Find the document on the QA Documents Page and right click on the document’s entry.

iii. Select ‘Copy link Address’.

iv. Paste the link into the appropriate field in the QAPP and SOP Tracking Database.

Note: To keep the database useful, it is the duty of the user, who is responsible for the entry or update to the entry, to change the link in the QAPP and SOP Tracking Database where appropriate.

5. When data entry is complete, scroll to the bottom of the sub-window and select the Save Record Button.
5.2 Updating a QAPP or SOP Record

1. From the Main Menu, select the relevant tab along the top of the database (QAPP or SOP).
2. To find a specific file, the user should select the dropdown box located right under the tabs. This list is organized by its Document ID number.

   Note: To the right of the dropdown box, there are also arrows that can scroll through the database’s records as well. However, as entries are put in as they are created, this is not a time efficient way to find a record of interest.
3. Update the appropriate fields.
4. When data entry is complete, scroll to the bottom of the sub-window and select the Save Record Button.

5.2.1 Additional Steps for Yearly reviews

When updating the QAPP And SOP Tracking Database due to the yearly review of a QAPP or SOP, additional steps should be followed:

1. The user should ensure that the fields ‘Date of Next Review’, ‘Date of Last Review was Completed’, and ‘Last Review Completed By’ are filled. The ‘Date of Next Review’ should be filled with a date that is one year from the date in the field in ‘Date of Last Review was Completed’.
2. If during a yearly review of a document it is determined that the document needs an update, the user should check the box ‘Revisions Required (If Yes, Detail In Notes)’ and then loosely detail changes needed in the ‘Notes’ field.

   Note: If any Revision to the QAPP or SOP is created due to a yearly review, a new QAPP or SOP record should be created with a numerically greater number in the ‘Revision Number’ field than the
previous QAPP or SOP record. When the new QAPP or SOP revision is approved, the user should obsolete the previous record. (See Section 5.3)

3. The User should then sign onto SharePoint if not logged in already
4. The User should then navigate to the page that contains the QAPP And SOP Tracking Database. The user should select the excel file named ‘Document Review Record’.
5. In the excel file, locate the Document’s ID and add the Date that the QAPP or SOP was reviewed. Sign beside that date. If that QAPP or SOP needs to be added to the excel file, see Appendix C.
6. Sign out and close SharePoint.
7. Request a Signature Sheet for the reviewed QAPP or SOP from management. Management will then request that this sheet will be added to the DAQ Website.

5.3 Obsoleting an QAPP or SOP Record
1. Find the QAPP or SOP record that needs to be obsoleted. (Using the same method described in step #2 of Section 5.2)
2. Scroll to the bottom of the sub-window and check the box ‘Obsolete?’
3. The user should then select the Save Record button to the right of the box that was just checked.
4. Select the Obsolete QAPPs or Obsolete SOP tab based on which record type you have just checked the box of.
5. To the right of the window, the user should select the red button.

6. The user will be prompted with several warnings. The first will ask the user if they are sure the user wants to continue. If ‘No’ is selected, the process is stopped. Select ‘Yes’.
7. The next warning will show you how many records will be copied to the Obsoleted Archive. If this number of rows is not correct, select ‘No’ and investigate why. If there is no reason that the number of rows is incorrect, contact the Database’s Controller. If the number of rows is correct or you find out they are correct after investigating, select ‘Yes’.

8. The next warning will state that the user is deleting the QAPP or SOP record from the Active table. Select ‘Yes’. Failure to do so will result in a duplicate record being produced. If a duplicate record occurs, contact the database’s controller to remove the duplication.
9. The Final warning will notify the user how many rows will be deleted from the other tab. If this number does not match the number of rows moved, contact the Database Controller.

10. Confirm that the Obsoleted QAPP or SOP can be located under the Obsoleted QAPPs or Obsoleted SOPs tab.
11. Confirm that the Obsoleted document is no longer in the QAPP or SOP tab.

5.4 Running a Report in the QAPP and SOP Tracking Database
To run a report:
1. From the main menu, select the QAPP or SOP Tab.
2. Select a desired report on the left side of the screen. Reports will always be dark blue buttons.
3. The Report will appear in the sub-window.

4. If the user needs to print the report, select the print Icon beside the Report’s name in the Sub-Window.
6.0 Requesting A Change to the QAPP And SOP Tracking Database

If a change needs to be made to the QAPP And SOP Tracking Database, an email should be sent to the Database’s Controller as well as the PPB Supervisor. Examples of possible changes that could be suggested are a change to a report, a new feature, a new field of information, etc.

Information that should be included in the email:

- The window(s) that needs to be changed.
- A description of what needs to be changed and why that change needs to occur.
- Any additional information that the Database Controller may need to complete the change.

Note: All Changes must be approved by the PPB Manager.

Before any change is implemented, PPB staff will be allowed to inspect the change, decide if the change is adequate or sufficient, and if any additional changes need to be made.

Minor changes, such as adding a report or a button, will result in the current file being replaced as if the QAPP And SOP Tracking Database had been Checked In to SharePoint (See Section 4.3).

Major changes, such as adding a feature or new field to the database table, will result in the Database Controller renaming the previous QAPP And SOP Tracking Database on SharePoint to ‘(Obsolete EF: YYYYMMDD) QAPP And SOP Tracking Database’ where YYYYMMDD is the day that the Database Controller renamed the file. The Database Manager will then upload the new file with the major changes. The new file will be named ‘QAPP And SOP Tracking Database’. This will prevent an accidental loss of data between revisions.
7.0 Revision History

Significant Changes include:

- New SOP Created.
Appendix A: Alternate Check In Procedures

Occasionally, a Microsoft update may disable SharePoint’s ability to upload the database as explained in Section 4.3. If this occurs, the user should:

1. When the user has finished with the file, return to the SharePoint site page where the file is stored. Select ‘See all’ at the top of the list located on the right side of the page.

2. Towards the top of the screen, select ‘Upload’, and select ‘Files’.

3. In the Window that opens, navigate to the QAPP And SOP Tracking Database downloaded on the user’s computer, and select Open. The file must have the same name as what is listed on the SharePoint site, or SharePoint will treat the uploaded file as something new.

4. Momentarily, there will be a message stating that the file is being uploaded. Then a window will appear stating that the file was not uploaded but asks if you would like to replace the file on SharePoint. Select ‘Replace’.
5. To finish the process, find the Access file on the page you just uploaded the file to, right click or select the three vertical dots beside the file's name, go to ‘More’ and then select ‘check in’.

6. A window will appear asking what changes you made. Fill the box out with some amount of info and select ‘Check in’.

Note: Selecting ‘Discard Check Out’ will interrupt the process and revert the file uploaded back to when the file was first checked out.
7. The file is now ready to be checked out and changed by someone else. Download the database again and ensure that changes were uploaded. If changes were not uploaded by SharePoint, contact the Database Controller.

8. **Delete the copies of the database off the user's computer** so that users are not confused by the older file next time the database is checked out.
Appendix B: Assigning a Document ID

To Assign a Document ID to a new QAPP or SOP:

1. Sign into Microsoft Teams.
2. Click on the Teams Button.
3. In the list to the right of the screen called ‘Your List’, find ‘DAQ – Projects and Procedures Branch’ and select the ‘General’ subgroup.
4. Then at the top of the header select ‘Files’.

5. Find the file named ‘DAQ Document ID Builder’ and select it. See example screenshot.
6. Select the ‘Lookup’ tab at the bottom of the screen.

7. Determine which group the new QAPP or SOP should belong to using the green box.
8. Scroll to the right until the appropriate column in the blue box is found
9. Enter the name of the new QAPP or SOP in the first available blank spot of the appropriate column
10. Select the ‘ID Builder’ tab at the bottom of the page

11. Use the dropdown boxes to build the Document’s ID
12. Copy the ID from the field ‘Final’ and place it into the appropriate field in the QAPP and SOP Tracking Database
Appendix C: Adding QAPPs and SOPs to the Document Review Record

- Adding a new Document to the Document Review Record
  1. Sign into SharePoint and Locate the Document Review Record.
  3. Copy the Template Table
  4. Select the correct Document group tab. The naming format of each tab would be DAQ-XX where XX is the group number assigned by the Document ID builder.
  5. Scroll to the right until the end of the spreadsheet and paste the Template Table into the correct Tab’s spreadsheet. If the document being reviewed is not the next numerical ID number, find the location that the document should be at, insert columns until there is enough room, and paste the Template in that location instead.
  6. In the Name Field, enter the Document’s Name
  7. In the Revision Field, enter the Document’s Revision number
  8. In the Effective Date, enter the Date that the Document was first put into service.

Note: If the Document being added is a new Revision instead of a new type of Document, instead clear the Revision Field, the Effective Date Field, and any older reviewed on dates as well as signatures. Put in the new Revision number and the new effective date. Older Revision Review Dates will be preserved by the PDF that was requested from management.