Sample Custody, Logbook Labels, and Prep Worksheet Manager for Algal Growth Potential (AGP) Samples

1. INTRODUCTION

1.1. This SOP details the procedure for tracking AGP sample custody. Prior to analysis, the analyst checks out samples from the Receiving Room, creates appropriate worksheets, prints labels, and checks samples into Biology custody. When the analysis has been completed, the sample is discarded from LIMS. LIMS analysis IDs include AA-AGP, AA-AGP-SA, and AA-AGP-SW.

2. SAMPLE COLLECTION AND PRESERVATION

2.1. Receiving staff is responsible for receiving samples shipped from field personnel that collect water samples throughout the state (SOP FS-1000). AGP samples are checked out of receiving and checked in to LIMS in the Tox lab and stored in the Biology Walk-in. Analysts have access to the storage areas to retrieve the samples for analysis.

3. EQUIPMENT AND SUPPLIES

3.1. Laboratory Information Management System (LIMS)-enabled computer with scanner attachment

3.1.1. Located in the southeast corner of the Culture Lab (B246).

3.2. Small SATO label printer

3.3. Labels for SATO label printer, 19 x 44 mm size

3.4. *AGP Sample Log-in* logbook

3.5. Employee ID badge

3.5.1. Analyst must be a custodian in LIMS to be able to check out/in samples. The Laboratory Support staff maintain the custodian lists.

4. RECEIVING SAMPLES

4.1. Samples can be received from the Receiving Room once they have arrived. These samples can be signed out of the Receiving Room if they have not been logged into LIMS yet.

4.1.1. To sign out samples, match field IDs on the sample containers to the field IDs on the custody sheets. Sign the bottom of each individual custody sheet with analyst name, date/time, sample type, and number of samples picked up.

4.1.2. Sometimes late arriving samples are logged in by Receiving and placed in the Biology Walk-in Refrigerator. Check Prep Worksheet Manager and the

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walk-in fridge daily so the samples do not get overlooked. Some tests do not get Tox testing done but do have AGPs, so they may arrive independently of other tests.

4.1.2.1. The LIMS "Scheduling Tracker" can be checked for future scheduled AGP samples by going to "Laboratory>Technical>Scheduling Tracker" and selecting the date range and test.

4.1.2.2. The LIMS "Backlog Reports" can be setup to check for AGP tests that have arrived at the lab and have been logged in by going to "Laboratory>Technical>Backlog Reports".

4.1.2.3. Generally, FYI3 and FYI5 sampling events have AGP samples.

4.2. Sample Check Out

4.2.1. Collect samples from the Receiving Room that have been logged in by Receiving staff. Sample containers will have a large label with a Sample ID number, field information, and barcode. Before leaving the Receiving Room, check out the samples using the computer in the Receiving Room. Log into LIMS. Select **Laboratory → Receiving → Custody**.

4.2.1.1. For samples retrieved from the Biology walk-in refrigerator, samples can be checked out at the designated computer in the Tox lab. Continue, following the procedure listed below.

4.2.2. In the window that pops up, select the first button to **Check Out** samples.

4.2.3. Scan the barcode of each sample. Be sure that the number of samples being checked out corresponds to the total number of samples scanned (the number located at the bottom of the window). If there are multiple bottles for a single sample ID, these count as one sample.

4.2.3.1. If the scanner is not working properly, the sample IDs can be typed in by hand.

4.2.4. After scanning the barcodes, click **OK**. When prompted, the analyst will scan their badge twice, then click **OK**. The samples are now in the custody of the analyst.

4.2.4.1. If the scanner is not working properly or the badge doesn't scan, the badge ID can be typed in. It is the last 5 digits in the upper right corner on the back of the badge.

4.2.5 If samples were checked out in the Receiving Room, bring them back to the Tox lab for check in.

5. SAMPLE CHECK IN

5.1. Using the computer in the corner of the Tox Culture Lab (B246), sign into LIMS. Go to **Laboratory → Receiving → Custody**. Click the second icon to **Check In** samples.

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5.2. Scan or type in each sample ID. Make sure the total number of samples entered is equal to the number of samples that were originally checked out.

5.3. Click OK.

5.4. Scan or type in the badge ID of the analyst who checked out the samples. Rescan this ID for verification.

5.5. Exit the Custody window.

6. CREATING PREP WORKSHEETS

6.1. Using any computer, sign into LIMS. Select **Laboratory → Technical → Prep Worksheet Manager**. Select the first shortcut button to **Create a prep worksheet**.

6.2. In the **Preparation ID…** list, select SOP-TA08_01/08_04.

6.3. In the **Samples/Tests…** box, select the samples that have been checked out, then select the analyst's name from the column labeled "**Assign to…**." Alternatively, click on the **Samples Checked Out** icon and select the name of the analyst whose name the samples were checked out under. Select the samples and press **OK**.

6.4. Click on the **Create the new worksheet** icon and click **OK**.

7. PRINT LABELS

7.1. Using the computer in the corner of the Tox Culture Lab (B246), sign into LIMS and turn on the SATO label printer (it's usually on).

7.2. Go to **Laboratory → Receiving → Print Preparation Labels.** Deselect any label icons that are selected by default by double clicking on the icons.

7.2.1. "Print Prep Labels" can also be found in Prep Worksheet Manager. It is the third icon from the left. Continue to follow the procedure listed below.

7.3. Click on the icon labeled **AGP Logbook Label**.

7.4. The samples can be loaded onto the screen using one of two ways:

7.4.1. Load Sample IDs from Prep Worksheet

7.4.1.1. Select the **Load sample IDs** from prep worksheet icon.

7.4.1.2. Use the drop-down menu to find and select the newly created worksheet.

7.4.2. Load Sample IDs Checked Out by Operator

7.4.2.1. Select the **Load sample IDs checked out by operator** icon.

7.4.2.2. Use the drop-down menu to find and select the analyst who checked out the samples.

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7.4.3. Click on the **Print List** icon. When the new window appears, make sure the SATO printer is selected. Only one copy of the labels is needed. Click **OK**.

7.5. Close the Print Prep Labels window by clicking on the **Exit label printing** icon.

7.6. In "LIMS #" column of the *AGP Sample Log-in Record*, affix the labels in ascending Sample ID (LIMS #) order, starting with a box for the blank sample (hand-write in).

8. COMPLETEING A PREP WORKSHEET

8.1. Prepare samples per SOP TA-08.01.

8.2. To complete a prep worksheet, open **Laboratory → Technical → Prep Worksheet Manager.** Select the **Open a prep worksheet logbook** icon.

8.3. In the **Worksheet Status:** box, select **Active**. In the **Prep ID:** select Biology. In the **Worksheets…** list, find the correct prep worksheet by using the Worksheet ID, Date Generated, and the analyst the worksheet was prepared by. A single click on a worksheet will bring up the Sample IDs and Test IDs found in that worksheet. They will appear in the **Samples/Tests on Worksheet** box.

8.4. To open a worksheet, either double-click on it in the **Worksheets…** list or single-click the **Open logbook for selected worksheet** icon.

8.5. Fill in the blanks using the *AGP Sample Log-In* Logbook.

8.5.1. **Prepared by** is the person who autoclaved and/or filtered samples

8.5.2. **Prep Start Date/Time** is the date and time that the samples were autoclaved and/or filtered

8.5.3. In **Prep Comments**, the comment should be "Autoclaved and filtered" for freshwater samples or "Filtered" for saltwater samples.

8.5.4. Fill in the **Temperature Start (°C)** for each sample using the temperatures recorded when parameters were taken.

8.5.5. Using the parameters taken before sample prep, recorded in the *AGP Sample Log-In* logbook, fill in the **Lab pH** and the **Lab Salinity** columns. The **Field Conductivity/Salinity** column is auto-populated.

8.5.6. If any comments were written in the comment section of the *AGP Sample Log-In* logbook, record them in the **Sample Comments** column.

8.5.7. Fill in the **Date/Time Inoculated** and **Inoculated By** columns (this will be used as the analysis date and time later on).

8.6. After checking to make sure all the information that was entered is correct, click on the **Complete** button at the bottom of the window.

8.7. Click the door icon or **File → Exit**.

8.8. Check the box in the "Prep Worksheet" column in the *AGP Sample Log-In* logbook to indicate the prep worksheet has been completed.

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9. DISCARDING SAMPLES

9.1. Sign in to LIMS. Go to **Laboratory → Receiving → Custody**.

9.2. Go to **Reports → Discard List**.

9.3. Under **Location**, select **Biology**. Under **Analysis Group**, select **Bio-AGP/LimNut**. Click **OK**.

9.4. The samples that appear on the discard list can be discarded. Print the list or the part of the list that is needed.

9.4.1. Samples are added to the discard list one month after the results are authorized.

9.5. Use a laboratory cart to remove all listed samples from the walk-in refrigerator. Push the laboratory cart back to the computer station.

9.6. If desired, place the samples in order by LIMS number. Verify that the samples on the cart are on the discard list.

9.7. In LIMS, go back to **Laboratory → Receiving → Custody.** Click the garbage can icon or **Custody → Discard.**

9.8. Enter each LIMS number by scanning the barcode on each sample. A warning window will appear when a sample designated as hazardous is scanned. Note the warning for special disposal methods. See a supervisor for hazardous sample disposal.

9.9. When all samples have been scanned, click **OK**.

9.10. Scan the ID badge of the analyst who is disposing samples. Rescan this ID for verification.

9.11. A window will open stating "Custody Verified". Click **OK**.

9.12. Click the door icon or **File → Exit.**

9.13. Discard samples by pouring them into the trough drain on the Culture Lab floor or into a lab sink.

9.14. Remove any labels on the sample bottles and rinse out the bottles using tap water and place them on a cart to be washed and reused.

9.14.1. After they are rinsed, throw away any sample bottles that are not reusable (e.g., stained, cracked, brittle, etc.). They do not need to be washed.

10. DATA ARCHIVAL

10.1. FDEP Laboratory Information Management System (LIMS)

10.2. *AGP Sample Log-in Record*

10.3. Use a black, waterproof pen for all bench sheets and logbooks.

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10.4. To correct raw data entries, place a single line through the incorrect or illegible entry, write the corrected entry near the error, date and initial the correction. Do not overwrite entries.

10.4.1. The corrected entry is written as near as possible to the error or in the comment box on the appropriate bench sheet.

10.4.2. If the correction requires an explanation, write a comment and reference the error. Initial and date the explanation. Do not attempt to put all information (correction and comments) into a small space.

10.4.3. Use sequential alphabetical annotation to identify errors and corresponding comments (use A for first error and use A for corresponding explanatory comment; use B for second error, etc.).

11. QUALITY CONTROL

11.1. Printing labels from LIMS for the AGP Sample Log-in Record saves time and helps prevent errors when transcribing sample information. If samples have not been logged in to LIMS by receiving staff, LIMS numbers are not available to print labels. Information taken from each sample bottle should be entered in the LIMS # column in the Log-in Record until such time that labels can be printed. This information must be unique to each sample (such as Field ID) because it will be used later to match LIMS numbers to each entry in the book.

11.2. If a problem occurs during sample processing, a nonconformance report (NCR) describing the problem and the corrective action is created in LIMS.

12. SAFETY/HAZARDOUS WASTE MANAGEMENT

12.1. Proper personal protection, including lab hood or ventilation system, lab coat, gloves and safety glasses, is required when working with chemicals and unprocessed samples.

12.2. Refer to the DEP Laboratory Quality Assurance Manual for sample disposal.

12.3. Refer to the DEP Health and Safety Manual.

12.4. Read MSDS information for reagent handling and disposal.

13. REFERENCES

13.1. DEP Laboratory Quality Assurance Manual

13.2. DEP Health and Safety Manual

13.3. FS1000, General Sampling

13.4. DEP SOP TA-08.01, Initial Algal Assay Sample Handling

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14. APPENDIX OF SIGNIFICANT CHANGES:

06/12/2008 Added Scope and Application, Summary of the Method, References and Appendix of Changes, Deleted bioassay from the document.

01/28/2015 Formatted for 508 compliance.

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