SWAMP HAB COC Workbook

Customized for Water Boards contracted lab services as of Sept. 2016

Instructions:

These Chain of Custody (COC) forms are customized for Cyanobacteria HAB sampling conducted by Water Boards to ensure contracted labs receive appropriate field info. Select the appropriate COC form using the tabs below, each lab has a different COC form/tab. Printing is easy and will fit 1 page.

To obtain other SWAMP comparable HAB COC forms that can be modified for project specific needs, go to HABs Portal Monitoring Section ----------> HABs Portal

Include handwritten or typed COC within shipping box. If shipping samples immediately after field sampling, take cell phone picture of handwritten COC. Use photo to type info into COC form.

Send typed COC after shipping samples to:
For any questions on using this workbook email: CyanoHAB.Reports@waterboards.ca.gov

Attention:

To request authorization for HAB Lab Analysis funding from State Board-OIMA* contact:

Beverley Anderson-Abbs (primary)	Marisa Van Dyke (Alternate)
Bev.Anderson-Abbs@Waterboards.ca.gov	Marisa.VanDyke@waterboards.ca.gov
(916) 322-2014	(916) 322-8431

*This workbook may be utilized for HAB sampling funded by other Water Board offices.

Laboratory Information:

LAB	REQUIRED CONTACTS	EMAIL	PHONE	ADDRESS	Analyte	Method	Quick tips
CDFW-WPCL	Dan Orr Christine Askari Mary Curry	Daniel.Orr@wildlife.ca.gov Christine.Askari@wildlife.ca.gov Mary.Curry@wildlife.ca.gov	(916) 358-2807 (916) 985-8419 (916) 358-4398	2005 Nimbus Rd, Gold River, CA 95670	microcystins, Total cylindrospermopsin anatoxin-a saxitoxin	ELISA ELISA ELISA ELISA	Chill immediately to < 6C

Maintain cool storage of samples from field collection through overnight shipping

Sample collection: Water samples (250 mL) should be collected in clean container (glass, PETG or HDPE plastic) and stored on wet ice in the dark. Sample may be frozen before shipping. If samples are analyzed for anatoxin or saxitoxin, add lab provided buffer solution after collection.

Sample shipment: Email both lab contacts above to BEFORE shipping. Samples can be received Monday through Friday from 8:00 am to 4:30 pm with the exception of all major holidays. If this does not work, contact lab to make special arrangements.

Bend Genetics	Tim Otten	customer_service@bendgenetics.co	541-600-4363	87 Scripps Drive, Ste. 108 Sacramento, CA 95825	Cyanobacteria ID Cyanobacteria, 16S rRNA, Total Microcystin marker, Total cylindrospermopsin marker, Total anatoxin-a marker, Total saxitoxin marker, Total microcystins_nodularin, Total cylindro spermopsin anatoxin-a saxitoxin	Identification of taxa by Microscope QPCR QPCR QPCR QPCR QPCR ELISA ELISA ELISA ELISA	NO FREEZING. Store in amber or tinfoil covered bottle

Maintain cool storage of samples from field collection through overnight shipping

Sample collection: Water samples (250 mL) should be collected into clean glass or PETG container and stored on wet ice in the dark (no freezing). If samples are analyzed for anatoxin or saxitoxin, add lab provided buffer solution after collection. Less water volume can be collected for fewer analyses, contact lab for modification.

Sample shipment: Samples received Monday - Thursday by 12 PM (PST) will typically post results the following day. Rush services are available, contact customer service for details. We recommend shipping samples double wrapped in plastic bags containing ice packs/wet ice placed into coolers and sent with next day delivery. If shipping multiple samples, be sure to clearly label each in indelible ink. Additional information on sampling protocols can be found at: www.bendgenetics.com/sampling

EPA Richmond Lab	Sue Keydel Regional Sample Control Coordinator	keydel.susan@epa.gov r9rscc@epa.gov	(415) 972-3106 510-412-2389	Sample Custodian US EPA Region 9 Lab 1337 S. 46th St., Bldg. 201 Richmond, CA 94804	microcystins, Total	ELISA	glass bottles only. Chill immediately to < 6C

* Only send water samples to this lab AFTER receiving approval/instruction from State Water Board-OIMA staff (see contacts listed under Instructions section)

Sample collection: Water samples (4 oz/120 mL) should be collected in clean glass thick-walled jars/bottles, keep in dark (use foil if not amber glass). Fill samples only 25-50% full to reduce danger of breakage during freezing.

Sample Shipment - for more complete instructions see object/file

C:\Users\mavandyke\Desktop\General

Regional Sample Control Coordinator must be called at 510-412-2389 before samples are shipped to alert the lab to expect samples. If a message is left it should include: the project (i.e. Cyanotoxins for CA Lakes/Waters, waterbody name), the analyte (i.e. microcystin); the number of samples; shipping date; and tracking number.

Samples are typically placed in a cooler, with double-bagged wet ice or blue ice, and shipped using priority overnight mail to arrive at the analyzing laboratory the next morning. For shipping, glass samples bottles should be protected from breakage ("bubble wrap" is recommended).

Samples should be shipped for overnight delivery, for receipt by the lab on Monday to Thursday. **Samples must not be shipped on a Friday**, unless special arrangements have been made for the samples to be received and processed by the lab, so that they do not sit in a warehouse until delivery the following Monday.

SWAMP HAB

REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY (COC) RECORD

SWAMP (Surface Water Ambient Monitoring Program)
is administered by the State Water Resources Control Board

Group:	Toxins	**SWAMP ProjectCode:**	SWAMP_FHAB_2016	**Field Sampling Lead:**		
Fiscal Year:	16/17	**Sampling Procedures Used:**		SWAMP HAB QA/DM:	Marisa Van Dyke (916) 464-4644	Marisa.VanDyke@waterboards.ca.gov
Regional Board:		**Sampling Agency:**		Freshwater HAB Project:	Bev Anderson-Abbs (916) 322-2014	Bev.Anderson-Abbs@Waterboards.ca.gov
EventCode:	WQ	**Field Crew:**		Contracts:	Jennifer Salisbury (916) 319-0232	jennifer.salisbury@waterboards.ca.gov

SampleID	Sampling Location/ Station Name	Sample Date	Collection Time	Sample Volume	Circle / Select: Sample Type Code	Circle / Select: Sample Container	Circle / Select: Field Preservation	Remarks	Water Analysis Authorization *Circle/select requested analysis, see comments below* Analysis: Toxins[1,2,3,4] # Bottles	Analysis: Toxins[1,2,3,4] # Bottles	Analysis: Toxins[1,2,3,4] # Bottles
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
				250 mL	Grab - Integrated	Glass PETG HDPE	Cooled 2-6 °C - Frozen				
								TOTAL	0	0	0

Comments: Sample volume = 250 mL; use 2x larger bottle if freezing sample; if testing for anatoxin add buffer solution after collection (1 part buffer to 9 parts sample)

[1] Analysis -Microcystins (ELISA) RUSH; total fraction, not field filtered

[2] Analysis -Anatoxin-A (ELISA) RUSH; total fraction, not field filtered

[3] Analysis -Cylindrospermopsin (ELISA) RUSH; total fraction, not field filtered

[4] Analysis -Saxitoxin (ELISA) RUSH; total fraction, not field filtered

Samples Relinquished by:		**Samples Received by:**	**Distribution of COC form: Original accompanies shipment, Electronic copy emailed to**
Name (Print and Sign)	**Date & Time**	**Name (Print and Sign)** **Date & Time**	CyanoHab.Reports@waterboards.ca.gov
			Daniel.Orr@wildlife.ca.gov
			Christine.Askari@wildlife.ca.gov
			Mary.Curry@wildlife.ca.gov

Attention Lab - If sample arrives >6 °C do not analyze

SWAMP HAB

REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY (COC) RECORD

SWAMP (Surface Water Ambient Monitoring Program)
is administered by the State Water Resources Control Board

Group:	Freshwater HABs	**SWAMP ProjectCode:**	SWAMP_FHAB_2016	**Field Sampling Lead:**		
Fiscal Year:	16/17	**Sampling Procedures Used:**		SWAMP HAB QA/DM:	Marisa Van Dyke (916) 464-4644	Marisa.VanDyke@waterboards.ca.gov
Regional Board:		**Sampling Agency:**		Freshwater HAB Project:	Bev Anderson-Abbs (916) 322-2014	Bev.Anderson-Abbs@Waterboards.ca.gov
EventCode:	WQ	**Field Crew:**		Contracts:	Jennifer Salisbury (916) 319-0232	jennifer.salisbury@waterboards.ca.gov

SampleID	Sampling Location/ Station Name	Sample Date	Collection Time	Sample Volume	Field Preservation	Circle / Select: Sample Type Code	Circle / Select: Sample Container	Remarks	Water Analysis Authorization *Circle/select requested analysis,see comments below* (1) Bottle per sampling location/site		
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID
				250 mL	Cooled 2-6 °C Only	Grab - Integrated	Glass - PETG		Analysis: - Toxins 1,2,3,4	Analysis: - QPCR 5,6,7,8,9	Analysis: Microscope ID

Total # sites/bottles:

Comments: For each row choose analysis corresponding to # 1 - 9 below; Sample volume = 250 mL; If testing for anatoxin add buffer solution after collection (1 part buffer to 9 parts sample).

1 microcystins + nodularin by ELISA, Total fraction measured (no field filtering)

2 Anatoxin-a by ELISA, Total fraction measured (no field filtering)

3 Cylindrospermopsin by ELISA, Total fraction measured (no field filtering)

4 Saxitoxin by ELISA, Total fraction measured (no field filtering)

5 Microcystin gene; lab analysis includes concentration + extraction per method

6 Anatoxin-a gene; lab analysis includes concentration + extraction per method

7 Cylindrospermopsin gene; lab analysis includes concentration + extraction per method

8 Saxitoxin marker; lab analysis includes concentration + extraction per method

9 Total cyanobacteria; quantifies "cell/mL", by qPCR

Samples Relinquished by:		**Samples Received by:** **Attention Lab - If sample arrives >6 °C do not analyze**		**Distribution of COC form: Original accompanies shipment, Electronic copy emailed**
Name (Print and Sign)	**Date & Time**	**Name (Print and Sign)**	**Date & Time**	customer_service@bendgenetics.com; CyanoHab.Reports@waterboards.ca.gov

SWAMP HAB

REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY (COC) RECORD

SWAMP (Surface Water Ambient Monitoring Program)
is administered by the State Water Resources Control Board

US EPA Project Name: Cyanotoxins for CA Lakes/Waters

Use this form for samples shipped to US Environmental Protection Agency, Region 9 Laboratory, Richmond CA

Group:	Freshwater HABs	**SWAMP ProjectCode:**	SWAMP_FHAB_2016	**Field Sampling Lead:**		
Fiscal Year:	16/17	**Sampling Procedures Used:**		SWAMP HAB QA/DM:	Marisa Van Dyke (916) 464-4644	Marisa.VanDyke@waterboards.ca.gov
Regional Board:		**Sampling Agency:**		Freshwater HAB Project:	Bev Anderson-Abbs (916) 322-2014	Bev.Anderson-Abbs@Waterboards.ca.gov
EventCode:	WQ	**Field Crew:**		Contracts:	Jennifer Salisbury (916) 319-0232	jennifer.salisbury@waterboards.ca.gov

SampleID	Water Sampling Location/ Station Name	Sample Date	Collection Time	Sample Volume	Sample Container	Circle / Select: Sample Type Code	Circle / Select: Field Preservation	Remarks	Water Analysis Authorization: Analysis: Micocystins[1] # Bottles
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen	(include location i.e. Shoreline, open water, etc.	
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen		
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen		
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen		
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen		
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen		
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen		
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen		
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen		
				4 oz/120 mL	Glass	Grab - Integrated	Cooled 2-6 °C - Frozen		
								TOTAL	

Comments:

Sample volume = 120 mL; Sample containers should be filled only 25-50% full, do not fill more than one-half full

[1]Analysis - Microcystins in water by ELISA; RUSH, total fraction, not field filtered

Distribution of COC form: Original accompanies shipment, Electronic copy emailed keydel.susan@epa.gov;r9rscc@epa.gov;CyanoHAB.Reports@waterboards.ca.gov

Distribution of Field Sheet: Electronic copy emailed to keydel.susan@epa.gov;r9rscc@epa.gov;CyanoHAB.Reports@waterboards.ca.gov

Samples Relinquished by:		**Samples Received by:**	**Attention Lab - If sample arrives >6 °C do not analyze**
Name (Print and Sign)	**Date & Time**	**Name (Print and Sign)**	**Date & Time**