

# Marina Interagency Coordinating Committee (MIACC) & Anti-Fouling Strategies Workgroup (AFSWG) Meeting

**Tuesday, October 16<sup>th</sup>, 2018**

**CAL/EPA Building – 14<sup>th</sup> Floor, Room 1410**

**1001 “I” Street, Sacramento**

**1:00 PM - 4:00 PM**

**To attend in person:** Please arrive at the CAL/EPA Building by 12:50 PM to allow time to sign in and get a badge on the first floor.

## **To join the meeting online**

You can join by dialing one of the access numbers below:

**Mobile:** [tel://1-877-820-7831,\\*,295302#](tel://1-877-820-7831,*,295302#)

**Web Meeting:** <https://stateofcaswrcbweb.centurylinkccc.com/CenturylinkWeb/ChrisMonary>

**Primary Access Number:** 1-877-820-7831

**Guest Passcode:** 295302

**Hosted by:** State Water Resources Control Board

1. Introductions and Announcements		1:00 - 1:30 pm (30 mins)
<b>Speaker(s):</b>	<b>Michael Hanks</b> – Nonpoint Source Program, State Water Resources Control Board & <b>Vanessa Metz</b> – Coastal Nonpoint Source Program, CA Coastal Commission	
<b>Purpose:</b>	<ul style="list-style-type: none"><li>Take attendance (please be prepared to introduce yourself and your affiliation)</li><li>Announcements and updates from participants</li></ul>	
<b>Attachments:</b>	<a href="#">Final March 2018 meeting notes</a>	
<b>Announcements:</b>		
<b>Speaker Notes:</b>	Mike Hanks can be reached at: <a href="mailto:Michael.Hanks@waterboards.ca.gov">Michael.Hanks@waterboards.ca.gov</a> <b>Note:</b> All materials from this meeting will be posted on the on the CCC web page for the <a href="#">Marinas and Recreational Boating Workgroup</a> , and found under the heading ‘ <b>Archive of Meeting Notes &amp; Presentations</b> ’ – 2018, October.	
<b>Action Items</b>	All finalized minutes are posted in MIACC Archive above for future access	

2. Update on In-water Vessel Hull Cleaning Studies		1:30 - 1:45 pm (15 mins)
<b>Speaker(s):</b>	<b>David Elias</b> – Senior Engineering Geologist, San Francisco Bay Regional Water Board	
<b>Purpose:</b>	To give an update on In-water Vessel Hull Cleaning (IWVHC) Studies being conducted by the University of Maryland.	
<b>Background:</b>	About 10 years ago the US Maritime Administration funded studies regarding discharges from an IWVHC technologies designed to remove both invasive species and biocides from the effluent. This study was the basis for the SFB Regional Water Board required BMP. The University of Maryland is furthering this work with additional vendors. The results of the study will be useful for further permitting of such technologies.	
<b>Attachments:</b>	IWVHC BMP and UM materials available after meeting	
<b>Speaker Notes:</b>	David Elias can be reached at: <a href="mailto:David.Elias@waterboards.ca.gov">David.Elias@waterboards.ca.gov</a>	
<b>Action Items</b>		

3. OSHA/Cal OSHA Safety Pollution Regulations for Compliant Vessel Antifouling Coating Replacement Process		1:45 - 2:15 pm (30 mins)
<b>Speaker(s):</b>	<b>Johntommy Rosas – Certified Marine Coatings Applicator</b>	
<b>Purpose:</b>	To provide information on the application and process for eco-compliant removal of vessel anti fouling coatings containing copper/copper compounds and the reaction to galvanic corrosion by stray current corrosion from faulty vessels bonding and grounding.	
<b>Background:</b>	Improper grounding or stray electric current-electric current in the water underneath and surrounding the vessel can actually neutralize the antifouling paint, causing biofouling to occur. The causes of electric current are either because the electrical system on the vessel is grounded improperly including cross grounding with different voltage systems on the vessel, or because there is stray electrical current coming from a vessel that is moored nearby and from improper / defective marina shore power system. The results are both anti fouling failures and coating metal compounds corroding. Vessel anti fouling removal with tent covering vessel and vacuum attachment to d a sanders the process also requires hull prep and epoxy barrier coatings for minimal dust discharge into the outside air.	
<b>Attachments:</b>	Presentation: <a href="https://www.youtube.com/watch?v=mvTgmKY8pSY">https://www.youtube.com/watch?v=mvTgmKY8pSY</a> Citations for presentation listed in appendix of agenda	
<b>Speaker Notes:</b>	Johntommy Rosas is a USCG Certified Builder of documented vessels master shipwright 37 years and certified coatings applicator by all the major marine coatings manufactures 31 years. Johntommy can be reached at: <a href="mailto:tattnlaw@gmail.com">tattnlaw@gmail.com</a>	
<b>Action Items:</b>		

4. Clean Marinas Update		2:15 - 2:45 pm (30 mins)
<b>Speaker(s):</b>	<b>Kathy Obrien – Clean Marinas Program</b>	
<b>Purpose:</b>	Present update on Clean Marinas Program merger with boat yards, status, name change and activities.	
<b>Background:</b>	In 2004, The California Clean Marinas Program was established as an ongoing endeavor by a marine industry alliance determined to provide environmentally clean facilities and protect coastal and inland waters from pollution through compliance of best management practices.	
<b>Attachments:</b>	NA <i>PPT will be available after meeting</i>	
<b>Speaker Notes:</b>	Kathy OBrien is the General Manager of Sun Harbor Marina in San Diego. Kathy has held multiple positions on the board of Clean Marinas Program since 2005. Kathy can be reached at <a href="mailto:kathy@sun-harbor.com">kathy@sun-harbor.com</a>	
<b>Action Items:</b>	none	

**2:45 – 2:55 pm BREAK (10 mins)**

5. Implementation Update on the Shelter Island TMDL		2:55 - 3:15 pm (20 mins)
<b>Speaker(s):</b>	<b>Kelly Tait / Karen Holman – Port of San Diego</b>	
<b>Purpose:</b>	To provide information on progress made to implement the Shelter Island Yacht Basin Dissolved Copper TMDL.	
<b>Background:</b>	Port officials were expected to reduce copper loads at Shelter Island Yacht Basin by 40 percent by 2017; the port district reportedly achieved a 45.4 percent reduction of copper in the basin.	
<b>Attachments:</b>	<a href="http://www.thelog.com/local/port-of-san-diego-continues-to-tout-copper-reduction-program/">http://www.thelog.com/local/port-of-san-diego-continues-to-tout-copper-reduction-program/</a>	<i>PPT will be available after meeting</i>

5. Implementation Update on the Shelter Island TMDL		2:55 - 3:15 pm (20 mins)
<b>Speaker Notes:</b>		
<b>Action Items:</b>		

6. Marine Invasive Species Management		3:15 – 3:45pm (30 mins)
<b>Speaker(s):</b>	<b>Maren Farnum &amp; Lina Ceballos</b> – Environmental Scientists, Executive Office & Marine Invasive Species Program	
<b>Purpose:</b>	To discuss the implementation of the Commission's biofouling regulatory program and an ocean planning partnership pilot between the Port of San Diego and the State Lands Commission that could help support marine invasive species and water quality management.	
<b>Background:</b>	The Commission's biofouling regulations went into effect Oct. 2017. This presentation will provide an overview of the implementation process, lessons learned, and next steps. The second part of the presentation will focus on a pilot ocean planning project between the Commission and the Port of San Diego. As part of the pilot, the Partners have developed an interactive Web Mapping Application for State waters offshore San Diego County. The Web Mapping Application contains over 80 spatially referenced, publicly available datasets that can be viewed to understand and address marine resources management challenges, including those related to water quality and invasive species.	
<b>Attachments:</b>	NA <i>PPT will be available after meeting</i>	
<b>Speaker Notes:</b>	Maren Farnum is an environmental scientist with the Executive Office of the State Lands Commission. Lina Ceballos is a senior environmental scientist with the Marine Invasive Species Program in the Marine Environmental Protection Division of the State Lands Commission: <a href="mailto:maren.farnum@slc.ca.gov">maren.farnum@slc.ca.gov</a> ; <a href="mailto:lina.ceballos@slc.ca.gov">lina.ceballos@slc.ca.gov</a>	
<b>Action Items:</b>	Please see more information about the Commission's Marine Invasive Species Program here: <a href="http://www.slc.ca.gov/Programs/MISP.html">http://www.slc.ca.gov/Programs/MISP.html</a> ; Please see more information about the San Diego Ocean Planning Partnership here: <a href="http://www.sdoceanplanning.org">www.sdoceanplanning.org</a>	

7. MEETING WRAP-UP		3:45 – 4:00pm (15 mins)
<b>Speaker(s):</b>	<b>Mike Hanks</b> – Nonpoint Source Program, State Water Resources Control Board & <b>Vanessa Metz</b> – Coastal Nonpoint Source Program, CA Coastal Commission	
<b>Purpose:</b>	Open discussion: In addition to recapping the meeting, we would like to follow up on the March meeting discussion regarding alternating the meeting <i>locations</i> to different parts of the state for future meetings. Following the success of the March meeting in Marina del Rey, what are our potential options for a fall 2019 meeting? <b>Please let us know if there's any information on upcoming events or notices, I'd be happy to broadcast this info to the group.</b>	
<b>Background:</b>	Review follow-up actions from this meeting and solicit ideas for future meeting topics.	
<b>Action Items:</b>	<i>Please bring your ideas and suggestions of topics &amp; speakers for the Spring 2019 and Fall 2019 MIACC/AFWG meetings.</i>	

## **APPENDIX**

### **OSHA/Cal OSHA safety pollution regulations for compliant vessel antifouling coating replacement process citations**

1. <https://www.nace.org/Corrosion-Central/Corrosion-101/Galvanic-Corrosion/>
2. <http://www.cruisersforum.com/forums/attachment.php?attachmentid=172105&d=1529467584>
3. <https://www.cdpr.ca.gov/docs/emon/pubs/ehapreps/eh0805.pdf>
4. <https://newcontent.westmarine.com/wm-img/westadvisor/articles/Shore-Power-13.jpg>
5. [http://assets.blueseas.com/files/resources/newsletter/images/Ground\\_Fault.png](http://assets.blueseas.com/files/resources/newsletter/images/Ground_Fault.png)
6. [http://www.forestriverforums.com/attachments/photobucket/img\\_1146680\\_0\\_ebf4cd5eca16c8ae1d3bef0d73c8bef4.gif](http://www.forestriverforums.com/attachments/photobucket/img_1146680_0_ebf4cd5eca16c8ae1d3bef0d73c8bef4.gif)
7. <https://darchive.mblwhoilibrary.org/bitstream/handle/1912/191/chapter%2022.pdf?sequence=31>
8. <https://www.ecmweb.com/content/case-hot-marina>
9. <https://www.electricschockdrowning.org/esd--faq.html>
10. <http://www.boatus.com/seaworthy/assets/pdf/electric-shock-drowning-explained.pdf>
11. <http://www.boatus.com/seaworthy/assets/pdf/marina-dock-safety.pdf>
12. <https://law.resource.org/pub/us/cfr/ibr/001/abyc.E-09.1990.pdf>
13. <http://www.uscgboating.org/regulations/assets/builders-handbook/ELECTRICAL.pdf>
14. [https://www.waterboards.ca.gov/about\\_us/performance\\_report\\_1617/plan\\_assess/docs/fy1314/1112\\_r4\\_marinadelrey\\_toxics.pdf](https://www.waterboards.ca.gov/about_us/performance_report_1617/plan_assess/docs/fy1314/1112_r4_marinadelrey_toxics.pdf)
15. [https://www.waterboards.ca.gov/losangeles/board\\_decisions/basin\\_plan\\_amendments/technical\\_documents/96\\_New/Final%20MdR%20Sediment%20Characterization%20Report\\_processed.pdf](https://www.waterboards.ca.gov/losangeles/board_decisions/basin_plan_amendments/technical_documents/96_New/Final%20MdR%20Sediment%20Characterization%20Report_processed.pdf)
16. [https://www.cdpr.ca.gov/docs/dept/prec/2017/012017\\_af\\_paints.pdf](https://www.cdpr.ca.gov/docs/dept/prec/2017/012017_af_paints.pdf)
17. <https://www.paint.org/article/marine-coatings-making-sense-u-s-state-local-mandates-copper-based-antifouling-regulations/>
18. [https://www.epa.gov/sites/production/files/2015-10/documents/2001\\_10\\_30\\_nps\\_mmssp\\_section4.pdf](https://www.epa.gov/sites/production/files/2015-10/documents/2001_10_30_nps_mmssp_section4.pdf)
19. <https://www.dtsc.ca.gov/PollutionPrevention/upload/Scappingand-SandingHullFinal.pdf>
20. [https://www.usace.army.mil/Portals/2/docs/civilworks/recreation/Water\\_Safety/tools/guidelines\\_safe\\_operation\\_maint\\_marinas.pdf?ver=2016-07-25-130937-857](https://www.usace.army.mil/Portals/2/docs/civilworks/recreation/Water_Safety/tools/guidelines_safe_operation_maint_marinas.pdf?ver=2016-07-25-130937-857)
21. <https://www.osha.gov/Publications/osha2268.pdf>
22. <https://www.osha.gov/laws-regs/regulations/standardnumber/1915/1915SubpartC>
23. [https://www.osha.gov/OshDoc/data\\_MaritimeFacts/shipbreaking-factsheet.pdf](https://www.osha.gov/OshDoc/data_MaritimeFacts/shipbreaking-factsheet.pdf)
24. [https://www.osha.gov/dts/maritime/standards/guidance/shipyard\\_guidance.html](https://www.osha.gov/dts/maritime/standards/guidance/shipyard_guidance.html)
25. [https://www.osha.gov/dts/maritime/sltc/ships/surfaceprep/surfaceprep\\_all-in-one.pdf](https://www.osha.gov/dts/maritime/sltc/ships/surfaceprep/surfaceprep_all-in-one.pdf)
26. <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.16>
27. [https://www.osha.gov/pls/imis/sic\\_manual.display?id=921&tab=description](https://www.osha.gov/pls/imis/sic_manual.display?id=921&tab=description)
28. <https://www.dtsc.ca.gov/PollutionPrevention/upload/MediaBlastingFinal.pdf>
29. [https://www.cdpr.ca.gov/docs/dept/prec/2017/012017\\_af\\_paints.pdf](https://www.cdpr.ca.gov/docs/dept/prec/2017/012017_af_paints.pdf)
30. <http://www.dfo-mpo.gc.ca/Library/52635.pdf>
31. [ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/AnnualReports/2003\\_04AnnualReport/ar04-schiff\\_pg41-49.pdf](ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/AnnualReports/2003_04AnnualReport/ar04-schiff_pg41-49.pdf)
32. <https://escholarship.org/content/qt4dr8m4h1/qt4dr8m4h1.pdf>
33. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3919178/>
34. <http://www.dtic.mil/dtic/tr/fulltext/u2/a284381.pdf>
35. [https://www.researchgate.net/publication/269466237\\_Copper\\_emission\\_loading\\_from\\_antifouling\\_paints\\_and\\_their\\_relation\\_to\\_industrials\\_and\\_waste\\_water\\_effluents\\_to\\_the\\_Suez\\_bay\\_transit\\_area](https://www.researchgate.net/publication/269466237_Copper_emission_loading_from_antifouling_paints_and_their_relation_to_industrials_and_waste_water_effluents_to_the_Suez_bay_transit_area)
36. [https://www.equipcoservices.com/sales/ysi/pro30.html?gclid=EAlaIqObChMIzvfrqefP3QIVyQoqC\\_h3f3QUKEAAYASAAEqJoA\\_D\\_BwE](https://www.equipcoservices.com/sales/ysi/pro30.html?gclid=EAlaIqObChMIzvfrqefP3QIVyQoqC_h3f3QUKEAAYASAAEqJoA_D_BwE)
37. <https://www.ysi.com/File%20Library/Documents/Manuals%20for%20Discontinued%20Products/038503-YSI-Model-85-Operations-Manual-RevE.pdf>
38. <http://www.electrochemsci.org/papers/vol12/120201232.pdf>
39. <https://www.paint.org/article/use-copper-based-antifouling-paint-u-s-regulatory-update/>

40. [https://www.wartsila.com/docs/default-source/marine-documents/encyclopedia/wartsila-o-marine-encyclopedia.pdf?utm\\_source=web&utm\\_medium=web&utm\\_term=marine&utm\\_content=encyclopedia&utm\\_campaign=encyclopedia](https://www.wartsila.com/docs/default-source/marine-documents/encyclopedia/wartsila-o-marine-encyclopedia.pdf?utm_source=web&utm_medium=web&utm_term=marine&utm_content=encyclopedia&utm_campaign=encyclopedia)
41. [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Control-of-Harmful-Anti-fouling-Systems-on-Ships-\(AFS\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Control-of-Harmful-Anti-fouling-Systems-on-Ships-(AFS).aspx)
42. <http://www.imo.org/en/OurWork/Environment/Anti-foulingSystems/Pages/Default.aspx>
43. [https://www.google.com/search?q=boat+hull+cleaning+divers&num=20&newwindow=1&rlz=1C1CHBD\\_enUS807US807&source=lnms&tbn=isch&sa=X&ved=0ahUKEwj\\_7u968\\_dAhULKXwKHfqsB4EQ\\_AUIDygC&biw=1816&bih=974&dpr=2](https://www.google.com/search?q=boat+hull+cleaning+divers&num=20&newwindow=1&rlz=1C1CHBD_enUS807US807&source=lnms&tbn=isch&sa=X&ved=0ahUKEwj_7u968_dAhULKXwKHfqsB4EQ_AUIDygC&biw=1816&bih=974&dpr=2)
44. <http://events.nace.org/conferences/IMCS2008/papers/15.pdf>

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