



# SoCal SETAC NEWS

Society of Environmental Toxicology and Chemistry  
Southern California Chapter

Volume 8, Issue 2

[www.socalsetac.org](http://www.socalsetac.org)

May 2001

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## Now Accepting Advertisements for SoCal SETAC August NEWS

SoCal SETAC News is now accepting paid advertisements for commercial products and services as well as free job announcements.

Free job postings are limited to 5 lines at publication width and are subject to edit as needed to format the newsletter.

Job announcements beyond the 5-line limit described or including logos can be purchased at the commercial rates. Per issue ad rates are:

**Full Page: \$100**  
**Half Page: \$75**  
**Quarter Page: \$50**  
**Eighth Page: \$35**

Please send camera-ready advertisements or job listings to Joe Gully at [jgully@lacsdsd.org](mailto:jgully@lacsdsd.org) by 6/15/01 for the August issue.

## Meet The Board: Chris Stransky, AMEC



Oh no, it's my turn! Well, I believe I've been on the SoCal SETAC Board of Directors since 1995. I was caught for this article just before rotating off in June. My primary responsibility for the Chapter lately has been website creation and maintenance. I have thoroughly enjoyed seeing SoCal SETAC grow over the past several years. The opportunity to interact with this very talented and enthusiastic group has been extremely inspiring.

I was born in the San Diego Naval Hospital on the infamous day when Apollo 11 blasted off to the moon. When I was five, we moved to Huntington Beach.

*Continued on page 3 (MTB)*

## Montrose Update: Settlement Filed for World's Largest DDT Site

*Contributed by Julie Yamamoto*

After a decade of scientific studies and legal wrangling, the U.S. Department of Justice, on behalf of the National Oceanic and Atmospheric Administration and other government agencies, has filed a settlement agreement in federal court requiring that chemical companies provide for environmental clean up and restoration of wildlife contaminated by the world's largest known deposit of DDT. Under the settlement filed in December in the U.S. District Court in Los Angeles, Montrose Chemical and three related companies agreed to pay \$73 million to the United States and the state of California, bringing the total amount recovered through this action to approximately \$140 million. The restoration portion of this settlement is the largest payment for natural resource damages since the Exxon Valdez oil spill.

The Montrose Chemical factory in Torrance, Calif., near Los Angeles, was one of the world's largest manufacturers of DDT, a pesticide widely used from the late 1940s until 1972, when it was banned in the  
*Continued on page 2 (DDT)*

**DDT (continued from page 1)**

United States. The Montrose facility discharged its wastes into the ocean through the local sewer system. More than 110 tons of the DDT remains concentrated in 17 square miles of sea bottom near the sewer outfall. Fish caught in the area are considered by the state of California to be unsafe to eat, and bald eagles reintroduced to nearby Santa Catalina Island lay eggs with shells too weak to incubate and hatch.

Approximately \$30 million of today's settlement will be spent to restore natural resources harmed by the DDT. NOAA and other natural resource trustees, including the U.S. Fish and Wildlife Service, the National Park Service, the State Lands Commission, the California Department of Fish and Game, and the California Department of Parks and Recreation, are responsible for restoring injured resources. Another \$43 million from today's settlement will be available to clean up the contamination. The U.S. EPA will continue an ongoing investigation into the feasibility and effectiveness of capping the contaminated sediment by burying it with clean sediment. The state and federal EPA, in collaboration with State Fisheries and Health Agencies, are developing an Institutional Controls Program to advise the public of the continuing risk to human health, as well as a continuing commercial fish ban on the Palos Verdes Peninsula. Under the terms of the settlement, up to \$10 million of the cleanup funds could become available for more bird, fish and other restoration projects, depending on the remedy selected by EPA.

**REMINDER**

***Ballots for the Board of Directors election and approval for the amended Constitution and By-Laws are due by 5/11/01.***

**HELP! WE NEED A CPA**

***SoCal SETAC is in the process of obtaining non-profit status with both the State of California and the Federal government. As some of you may be aware, a non-profit organization is NOT automatically exempt from taxes, and the application process for exemption is rather complex. If you know a Certified Public Accountant who has worked with non-profit organizations, please forward the contact information to Lan Wiborg ([L7W@sdcity.sannet.gov](mailto:L7W@sdcity.sannet.gov)). Thanks for your help.***

***March Dinner Meeting Summary******Contributed by Steven Bay***

The March 20 chapter meeting was held at the Waters restaurant in Irvine and was attended by approximately 30 members. Chapter president Joe Gully gave a brief summary of the items discussed during the preceding board meeting, including our plans for the 2001 annual meeting. Joe also introduced some of the candidates for election to the Board or Directors: Daniel Karen, Jeff Armstrong, and Fabienne Reisen. The after dinner presentation was given by Dr. Dan Schlenk, of UC Riverside. Dan is a professor of aquatic toxicology at UCI and is active in the national SETAC organization.

Dan's presentation was on the "Exposure assessment of estrogens and beta-blockers in sewage effluent and outfall sites of North America". Dan summarized some of his recent research on endocrine disruptors, which are chemicals that mimic or enhance the effects of hormones in an organism. There are many sources of endocrine disrupting chemicals in the environment, including natural products, pollutants (e.g., DDT),

pharmaceuticals, and industrial agents (e.g., phthalate esters). One class of chemicals that has received much attention is estrogen mimics. These chemicals disrupt the function of endocrine organs throughout the body and can produce a wide array of effects, including altered reproduction. Research into endocrine disrupting chemicals in the aquatic environment was stimulated by studies in the mid 1980's that found hermaphroditic fish in streams receiving sewage effluent discharges. Subsequent research showed that that synthetic and natural estrogens were the cause of altered reproductive development.

Dan's research uses a variety of biomarkers, including measurement of vitellogenin (Vtg), to study exposure to estrogenic compounds. Vtg is an egg yolk protein whose expression is controlled by estrogen. Fish exposed to estrogenic compounds, either naturally or due to contamination, often contain high concentrations of Vtg in plasma. Laboratory studies have shown biological impacts when fish are exposed to estrogens at concentrations as low as 1-10 ng/L. Dan has also found evidence of endocrine disruption in fish exposed to outfall effluents at several locations, including Mississippi, New York, and the Hudson River. Recent research by Dan's graduate students have included studies of the effects of beta-blockers, drugs commonly administered to humans for treatment of heart problems. The molecular structure of beta-blockers is similar to that of estrogens. Laboratory studies indicate some of these compounds produce endocrine disruption, possibly by inhibiting the metabolism of natural estrogens.

Although he has been in California for only a short while, Dan has already initiated research projects to study endocrine disruption in local species.

One of these projects is a collaborative study of flatfish (hornyhead turbot) collected along a gradient of exposure from the Orange County Sanitation District's ocean outfall off of Huntington Beach. Preliminary data from this study indicate that male turbot have elevated concentrations of Vtg that are similar to levels found in female fish. Dan's presentation stimulated much discussion about the impact of endocrine disrupting chemicals on aquatic animals and the need for additional research in southern California.

***MTB (continued from page 1)***

As a youngster, and even now it seems, I have maintained a strong interest in bugs, reptiles, and fish. The number of odd pets I have had is far too long to list here. One of my favorites was a green iguana I had for 14 years creatively named "Iggy." After moving to Huntington, I soon became addicted to surfing and actually had surfing as a P.E. class (with grades) throughout high school. Interestingly, I was extremely frightened of the ocean during my toddler years in San Diego; now it's difficult to pull me out of the water. I also enjoy diving, water skiing, and fishing among other outdoor activities. At a young age my interest in marine biology was inspired by Jacques Cousteau and later by Ed Ricketts. In fact, I still own an entire original set of Cousteau Undersea Discovery books.

I attended Orange Coast College (Tangerine Tech) in Costa Mesa for a few years while helping run an aquarium maintenance business. I decided to transfer and complete my undergraduate education at UC Santa Barbara for the following reasons in order of importance; 1) surf and scenery; 2) it was at least 100 miles from home; 3) a strong biology program; and 4) the marine laboratory

located on Campus Point overlooks the ocean. I volunteered with the Santa Barbara Marine Mammal Rescue Foundation for several years and spent a partial summer monitoring whale behavior in the Saint Lawrence Seaway in Quebec. To make ends meet at UCSB I was a gardener for several people and worked for a private construction contractor. Despite a few minor (or major depending on how you look at it) distractions, I obtained a B.A. Degree in Aquatic Biology in 1992. I actually intended to go to Veterinary School following graduation. I've always felt a strong connection with animals - they never talk back and don't complain - so I decided to work for pet shops in high school and interned at Veterinary Hospitals for several years in Huntington Beach and Santa Barbara. I eventually decided veterinary work was not really my thing, primarily due to a high proportion of lunatic pet owners. One owner killed her pet Lhasa Apso by insisting on feeding her dog a daily home baked pot roast. She refused to believe dog food was for dogs. Following my last semester at UCSB I took a Fisheries Observer position on Alaskan fishing boats for a summer. I also spent a month or so living out of a truck exploring the northwest. After these adventures I followed my girlfriend Marnie (now my wife) back to San Diego where she was accepted to the teaching program at San Diego State University. Marnie happened to be my very enticing next-door neighbor the year I met her in Isla Vista, Santa Barbara.

After working as a deckhand on a fishing boat in San Diego Bay for several months I obtained a job at Analytical Technologies Inc. as an environmental chemist. I was hired despite failing a chemistry test given during the initial interview. I was definitely ill prepared for a

spontaneous chemistry exam at the time. After two years at ATI I shamelessly begged my way into a technician position in the Bioassay Laboratory at Ogden (now AMEC Earth and Environmental). In the meantime I was also accepted to the Ecology Graduate Program at SDSU. Under Dr. Richard Ford, I studied effects on juvenile white seabass and California halibut following laboratory exposures to sediments collected from several locations in Mission Bay and San Diego Bay. I examined effects on growth, survival, swimming ability, feeding behavior, lesion development, and DNA strand breakage in gill and liver tissue. Sea urchin fertilization and development tests were also performed on a number of sediments collected. The experiments were performed at Ogden with much appreciated assistance from a number of technicians. ATI provided support for a large number of chemical analyses. DNA strand breakage in Halibut tissue was performed at SPAWAR using the "comet assay" by fellow ex-board member Scott Steinert. The end result was a massive mound of data, much more than I originally intended to collect. I managed to graduate from SDSU in 1998 with one of the thickest Masters thesis publications on record.

At AMEC I now help manage the San Diego laboratory. My primary focus and interests have centered on the development and implementation of a strong toxicity identification evaluation program, management of sediment quality evaluation studies, and conducting various R&D related risk assessment studies. I am extremely fortunate to work with a very dedicated bright group of people and always look forward to new challenges and opportunities in this exciting field. The SoCal SETAC Chapter has definitely provided a great forum for keeping up to date on

interesting and important issues and studies performed in our region.

Please feel free to contact me for website suggestions or a grand tour of our laboratory anytime. Free abalone shells, sea urchin tests, and crayfish exoskeletons will be handed out while they last.

### ***2001 Annual Meeting Update***

#### ***Contributed by Joe Gully***

Planning for the upcoming 2001 SoCal SETAC Annual Meeting has kicked into overdrive and the second call for papers and registration package will be sent out any time (if not already).

The meeting will be held at the Hilton Hotel in Downtown Long Beach on July 13<sup>th</sup> and 14<sup>th</sup> (Friday-Saturday). The conference will focus much attention on the issues surrounding watershed management and TMDL's. Indeed, a short course on TMDL development will be offered by Dr. Arturo Keller (UCSB). This class is designed for professionals involved in watershed management, who are faced with the development and implementation of TMDL regulations. Also, Ken Schiff (SCCWRP) is organizing a Plenary Session devoted to showing scientists what managers and stakeholders need most for developing effective and efficient TMDLs. He has invited five speakers from various sectors (regulated, regulatory, and environmental advocacy) to provide their perspective on this important and timely topic. Finally, Dr. Paul Krause (Arcadis JSA) is preparing a platform session on the afternoon of the 14<sup>th</sup> to highlight some of the recent research and case studies on the subject of watershed management.

As always, the meeting will also focus

on other topics of interest to the membership. A second short course was organized by Steve Bay (SCCWRP) for professionals and students who have little first-hand experience with sampling at sea. The ocean monitoring staff of the County Sanitation Districts of Los Angeles will conduct a demonstration of the methods used to monitor marine environments for environmental impacts. This course is free for those registered for the meeting, but space is limited to the first 15 to sign up. Steve is also planning a session entitled "Resource Damage Assessment and Remediation of the Palos Verdes Shelf".

Additionally, papers from any field of environmental science can be submitted for platform or poster presentation. Students, particularly first year, are strongly encouraged to submit a poster detailing their proposed research for the Best Student Poster Award. This is a great opportunity for students (and their advisors) to organize their project and possibly get some funding (\$200) to help carry it out.

Speaking of posters, this year a poster-social will be held on Friday evening in order to highlight this research and kick off the meeting. The posters will be on display and each author will be offered 5 minutes to describe their research to the attendees. The remainder of the social will allow for informal discussion of the poster with the author or to simply catch up with friends and colleagues. Drinks (2) and appetizers will be served to all meeting attendees free of charge.

By all accounts, this year's SoCal SETAC Annual Meeting promises to be professionally stimulating and a great time. Remember, abstracts and pre-registration are due by June 15<sup>th</sup> so keep an eye out for the registration

package and second call for papers or check out the website for further details. See you there!

### ***Board Meeting Minutes March 2001***

#### ***Contributed by Karen Riveles***

On March 20, 2001, a SoCal SETAC Officer and Board of Directors meeting were held at the Waters Restaurant, Irvine, CA. Our meeting started with the introduction of our newest board member Dan Schlenk of UC Riverside. Followed by Lan Wiborg who presented the Treasurers Report. The SoCal SETAC non-profit status for the State of CA was endorsed and approved thanks to all of Lan's hard work. We discussed the need for an accountant with non-profit experience to help us with the federal application. We then discussed creative ways to encourage the membership to renew their dues.

Advertising, advertising, advertising, was our next topic of discussion! Did you know that we can advertise in our newsletter, in the program for the Annual Meeting, and through links on our web page? The Board discussed and approved the following fee structure: \$100 for full page, \$75 for half page, \$50 for quarter page, and \$35 for eighth page ad. Isn't that cheap! Further, job Announcements in a generic list form will be free of charge, but fancier ads with logos will be charged according to the aforementioned fee structure. See the newsletter advertisement for specifications.

Karen Riveles gave a lively Secretary's report. The membership database is being maintained and updated regularly. The current email distribution list for the newsletter and other chapter emails is 111 people.

Our current membership list is 78 people. Current members are those who are up to date in paying their chapter dues and are eligible to vote in chapter-wide elections and receive discounts on Chapter events. If you have any questions regarding your membership status, feel free to email Karen at [karenriv@aol.com](mailto:karenriv@aol.com).

Elections for new Board members for 2001 are here. Jennifer, Chris, and Jerry are rotating off the Board in July of 2001. Five nominations were received and approved by the Board: Michelle Anghera, UCLA (student); Fabienne Reisen, UCR (student); Dr. Arturo Keller, UCSB (academic); Dr. Daniel Karen, JSA/Arcadis (private); and Jeff Armstrong, OCSD (public). Ballots were distributed in late April and contain biographies of each nominee. Karen will collect ballots via email and at the PO Box. An email reminder will be sent out two days prior to the deadline. Any ballots received after the deadline will not be counted.

Joe Gully led the exciting discussion about the 2001 SoCal SETAC Annual Meeting: Long Beach Hilton, July 13-14 2001. We will be having a short course on TMDLs by Arturo Keller. The Board also discussed options for a second short course. The poster session will take place on the first night of the meeting. Each presenter will have 5 minutes to give a synopsis of their poster into an open microphone. A Best Student Poster Award will be given the next day. We are currently planning an excellent line-up of speakers for a Watershed Management Plenary Session on the second day.

Chris Stransky gave an enlightening presentation on SoCal SETAC web page. He discussed the finer points of advertising on our web page. Links are good, direct logos on the page are not allowed. We could have a link to our

Sponsors and then have a sponsor's page.

New Business!!!! Well, we never quite got to the new business, so we postponed until the next meeting. Perhaps it will be old business by then. The next meeting of the SoCal SETAC Board will be on June 20, 2001 Wednesday 10am—2pm in San Diego at AMEC (was Ogden). And everyone is invited!

### *President's Corner*

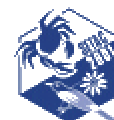
#### *Contributed by Joe Gully*

Well, it is hard to believe that my term as SoCal SETAC President is coming to a close and I am very pleased with the progress we have made in the past year. We followed up our 2000 Annual Meeting with two exceptional Dinner Meetings and have nearly finished jumping through the hoops required for non-profit status. We also began accepting advertisements and free job announcements for publication in our Newsletter and have another strong technical program in development for the 2001 Annual Meeting in Long Beach this July. All of these accomplishments are due in a large part to the exceptional group of Directors and Officers I was lucky enough to work with during my time as President. I am forever grateful for their efforts.

Although we have done much this past year, there are still several items left on the table. Particularly, in the coming year as Past President, I hope to continue development of a standard operating procedure for the establishment and administration of Technical Advisory and Review Panels (TARP's) by SoCal SETAC. These TARP's will provide a forum to address local (or the local impact of) environmental issues using the

expertise and balanced sector representation which has always been the hallmark of SETAC. Such local interaction by the Regional Chapters is becoming ever more vital as SETAC expands into a global society. To me, the Regional Chapters of SETAC have an opportunity to truly become the roots of the Society and the establishment of TARP's is an important step towards that end.

In closing, I want to wish the incoming President, Kat Prickett, all the good fortune and exceptional cooperation I have enjoyed in the past year as President. I would also like to thank the membership, Board of Directors, and Executive Committee for allowing me to serve the Chapter for the past several years. It has been a tremendous experience, full of personal and professional satisfaction and I look forward to the work ahead.



### *The Society of Environmental Toxicology and Chemistry*

#### *22nd Annual Meeting*

#### *Baltimore Convention Center*

*11 - 15 November 2001*

*Baltimore, Maryland, USA*

#### **THEME**

*Changing Environmental Awareness:  
Societal Concerns and Scientific Responses*

Check [www.setac.org](http://www.setac.org) for details

**Upcoming Events Calendar****Contributed by Marilyn Schwartz**MAY 2001**11 th SETAC Europe Annual Meeting.** May 6-10. Madrid, Spain.[www.setac.org](http://www.setac.org)**24<sup>th</sup> Annual Conference on Analysis of Pollutants in the Environment.** May 8-10. Portsmouth, Virginia.[www.battelle.org/conferences/pollutants](http://www.battelle.org/conferences/pollutants)**8<sup>th</sup> Annual St. Lawrence River Ecosystem Conference** May 15-16. Cornwall, Ontario, Canada[www.riverinstitute.com](http://www.riverinstitute.com)**The Association for Science in the Public Interest's First General Meeting.** May 31-June 2. Richmond, Virginia.[www.public-science.org](http://www.public-science.org)**Southern California Academy of Sciences Annual Meeting** May 19-20. University of So. California<http://earth.usc.edu/~scas/>JUNE 2001**2001 International Containment & Remediation Technology Conference and Exhibition.** June 11-13. Orlando, Florida.[containment@mail.fsu.edu](mailto:containment@mail.fsu.edu)**44<sup>th</sup> Annual Conference of the International Association for Great Lakes Research.** June 10-14. UWGB, Green Bay, Wisconsin.[www.iaglr.org/conference/abstracts/login.html](http://www.iaglr.org/conference/abstracts/login.html)**2001 Northern CA SETAC Annual Meeting.** June 17-19. Santa Cruz, California.[www.norcalsetac.org](http://www.norcalsetac.org)JULY 2001**The 7th Annual International Interdisciplinary Conference on the Environment.**

July 2 – 4. San Francisco, CA.

[www.desu.edu/mreiter/iea.htm](http://www.desu.edu/mreiter/iea.htm)**9th International Congress of Toxicology (ICT-IX).** July 8-13. Brisbane, Australia.[www.uq.edu.au/ICT9](http://www.uq.edu.au/ICT9)**11th Pollution Responses in Marine Organisms (PRIMO 1) Symposium.** July 10-13. Plymouth, UK.[www.PRIMO11.org](http://www.PRIMO11.org)**2001 SoCal SETAC Annual Meeting.** July 13-14. Long Beach, California.[www.socalsetac.org](http://www.socalsetac.org)SEPTEMBER 2001**Organic Soil Contaminants 2001 Conference.** September 2-5. Copenhagen, Denmark.[www.setac.org](http://www.setac.org)**28th Annual AQUATIC TOXICITY WORKSHOP,** September 30 - October 3.

Winnipeg, Manitoba, Crown Plaza Downtown.

[www.atw.ca](http://www.atw.ca)NOVEMBER 2001**22<sup>nd</sup> Annual SETAC Meeting.** November 11-15. Baltimore, Maryland.[www.setac.org](http://www.setac.org)**THIS SPACE FOR RENT****CHEAP !!!****FREE** Generic Job Announcements and **INEXPENSIVE** Commercial Advertisements/Announcements are being accepted for future issues of SoCal SETAC News

Free job postings are limited to 5 lines at publication width (2.40 in., 11 point, Times New Roman font) and are subject to edit as needed to format the newsletter. Job announcements beyond the 5-line limit described or including logos can be purchased at the commercial rates. Per issue ad rates are:

**Full Page: \$100****Half Page: \$75****Quarter Page: \$50****Eighth Page: \$35**Please send camera-ready advertisements or job listings to Joe Gully at [jgully@lacs.org](mailto:jgully@lacs.org) by 6/15/01 for the August SoCal SETAC News.

## SoCal SETAC Officers and Board of Directors - Fiscal Year 2000-2001

POSITION	NAME & AFFILIATION	CONTACT INFO	TERM	BASIC DUTIES
Past President	Marilyn Schwartz AMEC Earth and Environmental 5510 Morehouse Dr. San Diego, CA 92121	T: 858-458-9044 F: 858-458-0943 E: <a href="mailto:mjschwartz@oees.com">mjschwartz@oees.com</a>	07/01/00 - 06/30/01	Advisor/Stand-in for President and Vice-President
President	Joe Gully L.A. County Sanitation Districts 1965 Workman Mill Rd Whittier, CA 90601	T: 562-699-0405 x3060 F: 562-695-7267 E: <a href="mailto:jgully@lacs.org">jgully@lacs.org</a>	07/01/00 - 06/30/01	National SETAC Liaison Board Agenda & Action Items
Vice-President	Kat Prickett Arcadis JSA 301 E. Ocean Blvd, Suite 1530 Long Beach, CA 90802	T: 562-628-1176 F: 562-628-1196 E: <a href="mailto:kprickett@jsae.com">kprickett@jsae.com</a>	07/01/00 - 06/30/01	Program Committee Chair for SoCal SETAC Annual Meeting
Treasurer	Lan Wiborg City of San Diego, MWWD Environmental Monitoring & Technical Services Division 4918 North Harbor Drive, Suite 204A San Diego, CA 92106	T: 619-758-2341 F: 619-758-2309 E: <a href="mailto:L7W@sdcity.sannet.gov">L7W@sdcity.sannet.gov</a>	07/01/99 - 06/30/01	Membership Maintenance Meeting Finances & Contracts Non-Profit Application
Secretary	Karen Riveles UC Riverside	T: 909-276-7161 F: E: <a href="mailto:karenriv@aol.com">karenriv@aol.com</a>	07/01/00 - 06/30/02	Election Coordinator Board Meeting Notes
Board Member (Student)	Jennifer Jones UC Los Angeles	T: 323-462-6073 F: E: <a href="mailto:jjones@ucla.edu">jjones@ucla.edu</a>	07/01/99 - 06/30/01	
Board Member (Academic)	Open	T: F: E:	07/01/99 - 06/30/01	
Board Member (Private)	Chris Stransky AMEC Earth and Environmental 5510 Morehouse Dr. San Diego, CA 92121	T: 858-458-9111 x208 F: 858-587-3961 E: <a href="mailto:bcstransky@oees.com">bcstransky@oees.com</a>	07/01/99 - 06/30/01	
Board Member (Public)	Gerald McGowen City of Los Angeles, EMD 12000 Vista del Mar Playa del Rey, CA 90293	T: 310-648-5611 F: 310-648-5060 E: <a href="mailto:gem@san.ci.la.ca.us">gem@san.ci.la.ca.us</a>	07/01/99 - 06/30/01	Direct and Assist in the Development and Execution of Chapter Activities
Board Member (Student)	Ian Adam UC Santa Barbara	T: 805-571-1466 F: E: <a href="mailto:iadam@bren.ucsb.edu">iadam@bren.ucsb.edu</a>	07/01/00 - 06/30/02	
Board Member (Academic)	Daniel Schlenk Department of Environmental Sciences UC Riverside Riverside, CA 92521	T: 909-787-2018 F: 909-787-3993 E: <a href="mailto:daniel.schlenk@ucr.edu">daniel.schlenk@ucr.edu</a>	07/01/00 - 06/30/02	
Board Member (Private)	Tim Mikel Aquatic Bioassay and Consulting 29 N. Olive St. Ventura, CA 93001	T: 805-644-8686 F: 805-643-2930 E: <a href="mailto:tkmikel@vcvista.net">tkmikel@vcvista.net</a>	07/01/00 - 06/30/02	
Board Member (Public)	Steve Bay SCCWRP 7171 Fenwick Ln. Westminster, CA 92683	T: 714-372-9204 F: 714-894-9699 E: <a href="mailto:steveb@sccwrp.org">steveb@sccwrp.org</a>	07/01/00 - 06/30/02	

**SOCIETY OF ENVIRONMENTAL TOXICOLOGY AND CHEMISTRY  
SOUTHERN CALIFORNIA CHAPTER  
2000-2001 APPLICATION FOR MEMBERSHIP**

Please send application and payment (checks payable to Southern California SETAC) to SoCal SETAC, c/o Karen Riveles, P.O. Box 655, Riverside, CA. 92502. Please do not send cash.

Name \_\_\_\_\_ Affiliation \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_ E-Mail\*: \_\_\_\_\_

\*Newsletters will be sent electronically if you provide an email address; hardcopies will be sent upon request.

**Category of Employer: (Please check one that applies)**

Government \_\_\_\_\_ Industry/Business \_\_\_\_\_ Academic \_\_\_\_\_  
 Student \_\_\_\_\_ Consultant \_\_\_\_\_ Other \_\_\_\_\_

**Technical Background: (Please check one that applies)**

Atmospheric Science \_\_\_\_\_ Engineering \_\_\_\_\_  
 Biology \_\_\_\_\_ Health Science \_\_\_\_\_  
 Chemistry \_\_\_\_\_ Toxicology \_\_\_\_\_  
 Earth Science \_\_\_\_\_  
 Ecology \_\_\_\_\_ Other \_\_\_\_\_

**Degree(s) earned:** \_\_\_ B.A./B.S. \_\_\_ M.A./M.S. \_\_\_ Ph.D. \_\_\_ P.E. \_\_\_ Other \_\_\_\_\_

**Class of Membership for which you are applying: (Please check only one)\***

Annual membership covers July 1<sup>st</sup> - June 30<sup>th</sup>. Dues paid prior to May 1<sup>st</sup> will apply only to the current membership cycle.

\_\_\_\_\_ Active Member \$20.00 per year  
 \_\_\_\_\_ Regional Member \$20.00 per year  
 \_\_\_\_\_ Student Member \$10.00 per year

\***Active Members** and **Regional Members** are qualified professionals who share the stated purpose of the Chapter and who have education, training, research or applied experience in environmental toxicology and/or chemistry. **Active Members** must also be members of National SETAC. **Student Members** are individuals who share the stated purpose of the Chapter and are students showing promise of becoming qualified for Regional or Active status at a later date.

Please check here if you would prefer not to be included in the membership directory \_\_\_\_\_