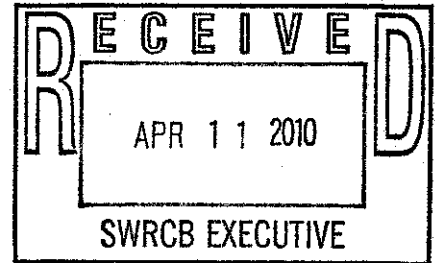




April, 12, 2010

Ms. Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814

Subject: Comments on March 22, 2010 Draft of OTC Policy



Dear Board Member and Staff:

As a member of the Expert Review Panel for the OTC Policy I first wanted to commend the Board staff on the effort they have put into addressing many of the comments they have received from interested stakeholders. The process has been open and has resulted in continued improvements in each of the drafts released for review. In keeping with the instructions released with the draft I will restrict my comments to the issue of compliance monitoring which changed from the previous draft.

While the current language is an improvement over previous drafts of the Policy I feel that there is still potential for confusion on what the actual basis for compliance will be under the Policy. As I understand, compliance would be based solely on the quantification of fish larvae, squid paralarvae, and later stage crab megalops and lobster phyllosome larvae collected with a minimum mesh size of 335 microns. One of the sources of confusion is the request to collect additional samples with 200-micron mesh nets. If the intent of the additional samples is strictly to provide qualitative information on other invertebrate meroplankton entrainment then this should be clearly stated. While I question the need for the additional samples since this type of information is generally available there may be locations where the information is of some interest to the Regional Boards. Therefore the language should clearly state that the 200-micron mesh sampling is at the discretion of the Regional Boards. I present some comments and suggested changes to the current language in the Draft Policy in the following table.

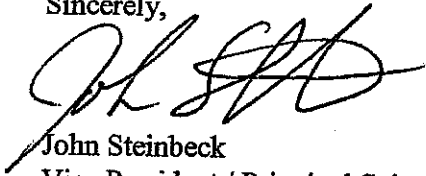
Page and Section	Current Language	Suggested Alternative
p. 5 Section 2.A.(2)(b)ii	“If screens are employed to reduce entrainment, compliance shall be determined based on <i>ichthyoplankton*</i> , and on the crustacean phyllosoma and megalops larvae, and squid paralarvae fractions of <i>meroplankton*</i> .”	“If screens are employed to reduce entrainment, compliance shall be determined based on reductions in entrainment of <i>ichthyoplankton*</i> , and later stage invertebrate larval fractions of <i>meroplankton*</i> that can be adequately sampled with nets having a mesh size no larger than 335 microns.”
p. 16 Section 4.B.(1)	“Prior studies that may have used a mesh size of 333 or 335 microns for sampling are acceptable for compliance with the review and approval of the Regional Water Board. If the Regional Water Board determines that a new baseline entrainment study shall be performed to determine larval composition and abundance in the source water, representative of water that is being entrained, then samples must be collected using a mesh size no larger than 335 microns. Additional samples shall also be collected using a 200 micron mesh to provide a broader characterization of other <i>meroplankton*</i> entrained.”	“Prior studies that used a mesh size of 333 or 335 microns for sampling are acceptable for compliance with the review and approval of the Regional Water Board. If the Regional Water Board determines that a new baseline entrainment study shall be performed to determine larval composition and abundance in the source water, representative of water that is being entrained, then samples must be collected using a mesh size no larger than 335 microns. At the discretion of the Regional Board, additional samples may also be collected using nets with 200-micron mesh to provide a broader characterization of invertebrate <i>meroplankton*</i> entrainment. The samples collected with the 200 micron mesh would only be used to provide a qualitative assessment of invertebrate <i>meroplankton*</i> entrainment.”
p. 16 Section 4.B.(1)	“The source water shall be determined based on oceanographic conditions reasonably expected after Track 2 controls are implemented.”	<b>Comment</b> - If the purpose of the required study is verifying the level of entrainment before and after controls are implemented then it does not seem necessary to determine the source water. Suggest deleting and perhaps adding a sentence to Section 4.B.(2) suggesting that data or other information are presented to verify that oceanographic conditions in the source water were similar for the periods the baseline and confirmatory studies were conducted.

Page and Section	Current Language	Suggested Alternative
p. 17 Section 4.B.(1)(a)	(a) Entrainment impacts shall be based on sampling for all <i>ichthyoplankton*</i> and invertebrate <i>meroplankton*</i> species. Individuals collected shall be identified to the lowest taxonomical level practicable. When practicable, genetic identification through molecular biological techniques may be used to assist in compliance with this requirement. Samples shall be preserved and archived such that genetic identification is possible at a later date.	(a) Entrainment impacts shall be based on sampling for <i>ichthyoplankton*</i> , and later stage invertebrate larval fractions of <i>meroplankton*</i> that can be adequately sampled with nets having a maximum mesh size of 335 microns. Individuals collected shall be identified to the lowest taxonomical level practicable. When practicable, genetic identification through molecular biological techniques may be used to assist in compliance with this requirement. Samples shall be preserved and archived such that genetic identification is possible at a later date.
p. 17 Section 4.B.(2)	"2) After the Track 2 controls are implemented, to confirm the level of entrainment controls, another entrainment study (with a study design to the Regional Water Board's satisfaction, with samples collected using a mesh size no larger than 335 microns, and with additional samples also collected using a 200 micron mesh) shall be performed and reported to the Regional Water Board."	"2) After the Track 2 controls are implemented, to confirm the level of entrainment controls, another entrainment study (with a study design to the Regional Water Board's satisfaction, with samples collected using a mesh size no larger than 335 microns shall be performed and reported to the Regional Water Board."  <b>Comment</b> – Why include requirement for additional sampling with 200 micron mesh beyond baseline if intent is to just characterize other meroplankton being entrained.
p. 18 Section 5.	" <i>Meroplankton</i> – For purposes of this Policy, refers to that component of the <i>zooplankton*</i> community composed of squid paralarvae and the pelagic larvae of benthic invertebrates. "	<i>Meroplankton</i> – For purposes of this Policy, refers to that component of the <i>zooplankton*</i> community composed of squid paralarvae and the pelagic larvae of benthic invertebrates. Meroplankton includes later stage invertebrate larvae such as crustacean phyllosoma and megalops stages that would be collected using nets with a minimum mesh size of 335 microns that are required for demonstrating compliance with this Policy."

While I question the overall approach in the Policy since I do not believe it will result in any benefits to the environmental quality of California, or the fish populations the Policy is intended to protect, the above changes would help address potential confusion on the specific issue of compliance sampling that will be required under the Policy. As I have stated previously, I believe that a Policy that focuses on addressing environmental effects of OTC through funding of mitigation projects would provide much greater benefits. Please note that this view was shared by most of the other members of the Expert Review Panel and was recently reiterated by Dr. Peter Raimondi, University of California, Santa Cruz, the principal consultant to the California Coastal Commission and other state agencies, in a recent article in the Los Angeles Times.<sup>1</sup>

Please contact me at your convenience if there are any questions on the comments I have provided.

Sincerely,



John Steinbeck  
Vice President / Principal Scientist  
Tenera Environmental Inc.

cc: Mr. Jonathan Bishop, California State Water Resources Control Board  
Mr. Dominic Gregorio, California State Water Resources Control Board

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<sup>1</sup> Leovy, J. Los Angeles Times, March 1, 2010. Power plants criticize proposal to block use of seawater for cooling machinery.