

SSFL CDO Expert Panel¹

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April 15, 2009

TO: Cassandra Owens, Los Angeles Regional Water Quality Control Board

Re: Tentative Amendment to Waste Discharge Requirements and Tentative Cease and Desist Order—The Boeing Company, NPDES CA0001309, CI No. 6027

The Expert Panel wishes to submit the following comments related to the above referenced documents that were issued to the Boeing Company and are being considered for public comment at the Board's meeting on May 7 and 8, 2009. Following the Board's recommendation, the Expert Panel has been providing outside independent review and consultation with the Boeing Company and its contractor Geosyntec, on the design and implementation of the Engineered Natural Treatment Systems (ENTS) for Outfalls 8 and 9 that were mandated in the Board's Order R4-2007-0056.

We respectfully submit the following comments for consideration by the Board in its amendment to the Order to incorporate source removal as a precursor to numeric enforcement limits on Outfalls 08 and 09.

1. The Expert Panel strongly supports and has supported source removal as ultimately necessary for compliance with the Board effluent limits. In our technical memorandum of April 2008, we recommended a variety of source controls and encourage Boeing to include such controls as well as others to be covered in their Work Plan for submittal to the Board.
2. Based on the Panel members' experience at other contaminated sites, we recommend that stormwater treatment will be necessary during and after source removal, until such time that the remediated site has been stabilized and a true "background" condition has been restored. Implementation of ENTS coupled with a design storm criteria can best meet that need, in our opinion.

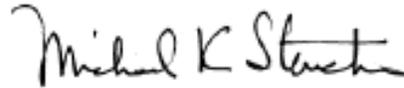
¹ The Expert Panel members are acting as independent expert consultants in order to assist the Regional Board and The Boeing Company develop and implement methods to meet the requirements of Cease and Desist Order R4-2007-0056, dated November 1, 2007. Their opinions and directives expressed herein are not the opinions and directives of their respective employers, the Regional Board nor The Boeing Company or their staff. Due to time constraints, Dr. Horner was not able to review this document; otherwise, all members of the Panel contributed to and approve of this comment letter.

3. The Fact Sheet for the new SSFL NPDES permit should acknowledge: (a) the Panel's specific charge (per the original NPDES permit and CDO) to develop a site specific design storm recommendation, (b) our submittal of this recommendation to Regional Board staff, and (c) the staff's response. We believe that the design storm recommendation should be included in the draft permit itself, but at a minimum, our recommendation should be included in the Fact Sheet. We understand that neither the Board staff nor the Board have accepted our recommendation at this time pending further information on a regional design storm. However, it is our understanding is that a final report² for the regional design storm was developed and should be noted and referenced in the Fact Sheet. Nevertheless, the recommendation developed by the Expert Panel was based on detailed, site-specific hydrologic analysis that we believe is consistent with and exceeds the technical standards for such planning. The analysis included a continuous hydrologic simulation (using SWMM) based on a 58-year period of record and a separate corroborating model prepared by Dr. Pitt. The Panel presented information to the Board and the public on how redundant ENTS facilities could treat water under the design storm criteria without creating significant environmental impacts and moving beyond the concept of "engineered natural treatment systems."
4. A key recommendation to the Board was the use of composite sampling which is consistent with the scientific literature and national recommendations made by the National Research Council in 2008. Our composite sampling recommendation should be included in the monitoring section of the SSFL NPDES permit or, at a minimum, be referenced in the Fact Sheet with a discussion beyond the current discussion of the very limited 13267 sampling that was done at the SSFL. We do not believe that grab sampling data is meaningful in comparison to composite sampling data for stormwater discharges, and we do not believe that a decision should be made based on the 2004 13267 paired sampling study that was conducted by Boeing, since the sampling dataset is very limited.
5. Consistent with Dr Stenstrom's commitment to the Board from the April 2008 hearing, we will soon be submitting a report to the Board on "background" levels of dioxins and metals for your consideration.
6. Please revise the inaccurate statement on p 46 of the Fact Sheet where it states the "Discharger selected" the Panel. This should instead read: "The Panel was selected by the Discharger with specific input and review from Regional Board staff and water resources-focused environmental organizations."

² K Schiff, D Ackerman, E Strecker, M Leisenring. 2007. Technical Report 520. Southern California Coastal Water Research Project. Costa Mesa, CA.
ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/520_designStorm.pdf

As our previous charge to develop a site specific design storm and Engineered Natural Treatments Systems at the SSFL outfall watersheds 008 and 009 originally came from the Regional Board, we would appreciate your guidance on how our Panel can continue to assist the Regional Board, Boeing and the public in the future.

Very truly yours,

A handwritten signature in black ink that reads "Michael K Stenstrom". The signature is written in a cursive style with a large initial "M".

Michael Stenstrom, Ph.D., P.E.
Chairman, SSFL Stormwater Expert Panel
For Watersheds 008 and 009