



California Regional Water Quality Control Board

Los Angeles Region



Terry Tamminen
Secretary for
Environmental
Protection

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Arnold Schwarzenegger
Governor

April 29, 2004

Donald L. Wolfe
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Administration – 12th Floor
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Alhambra, CA 91803

Ken Farfsing
City Manager
City of Signal Hill
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SUBJECT: CERTIFICATION OF THE HAMILTON BOWL TRASH NETS AS FULL CAPTURE SYSTEMS

Dear Messrs. Wolfe and Farfsing:

We are following up on your request for certification of the Fresh Creek Technologies, Inc.'s trash net system as a full capture system in your October 18, 2002 letter. The trash net system was installed at Hamilton Bowl in an effort to comply with the Los Angeles River Trash TMDL. As you are aware, the Los Angeles River Trash TMDL has been the subject of litigation in San Diego Superior Court and is presently on appeal.

In our February 4, 2003 letter, we expressed our concern with regard to the adequate sizing and maintenance of the capture device. Therefore, the system was given conditional certification for a period of one year, and you were encouraged to provide monitoring data and/or other evidence to support the claim that the system has the capacity and demonstrated reliability to qualify for a permanent certification.

In your June 16, 2003 letter, you stated that the trash net system could adequately handle a one-year, one-hour storm flow using the rational method. In addition, the trash net system was reportedly free of any operational problems during the first year of operation. Based on your findings, you have again requested certification of the trash net as a full capture system.

The Regional Board's February 4, 2003, conditional certification had been issued applying the full capture definition originally adopted by the Regional Board. That certification still applies and is being extended in this letter. However, as you are probably aware, the definition of "full

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capture system" for the Ballona Creek Trash TMDL was amended per Resolution No. 04-023 adopted on March 4, 2004 by the Los Angeles Regional Water Quality Control Board. It is likely that this definition will be applicable in future revisions of the Los Angeles River Trash TMDL. As a result, the Regional Board staff has also analyzed the Hamilton Bowl installation for compliance with the Ballona Creek Trash TMDL's full capture system definition. This analysis will remove any uncertainty in the event the Los Angeles River Trash TMDL's definition is subsequently modified.

The definition of a "full capture system" as defined in the Resolution No. 04-023 is as follows:

" A full capture system is any single device or series of devices that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate (Q) resulting from a one-year, one-hour, storm in the subdrainage area. Rational equation is used to compute the peak flow rate: $Q = C \times I \times A$, where Q = design flow rate (cubic feet per second, cfs); C = runoff coefficient (dimensionless); I = design rainfall intensity (inches per hour, as determined per the rainfall isohyetal map in Figure A), and A = subdrainage area (acres)."

Your consultant, John Hunter of the Hunter and Kennedy Associates (HKA) has provided runoff coefficient and subdrainage area information for Hamilton Bowl. Dr. Iraj Nasserri with the Los Angeles County Department of Public Works (LACDPW) provided an isohyetal map for one-year, one-hour rainfall intensity per definition of a full capture system. Figure A referenced above showed isohyetal map for one-year 30-minute rainfall intensity. From the information provided, the peak flow rate is calculated as follows:

C = 0.49 based on September 8, 2003 email from HKA (attached)

A = 191 acres based on 1970 bond map as detailed on August 28, 2003 email from HKA (attached)

I = 0.3 inches/hour based on isohyetal map submitted with October 27, 2003 email from LACDPW (attached)

$Q = 0.49 \times 191 \times 0.3 = 28.08 \text{ cfs}$

The reported trash net capacity is at 70 cfs. Therefore, using amended definition of a full capture system and the information provided, the trash net appears to have an adequate capacity and can be certified as a full capture system for the Hamilton Bowl drainage area under the following conditions:

- **End-of-Pipe Configuration:** The trash netting system must have an end-of-pipe configuration and not rely on diversion weirs.
- **Adequate Pipe Sizing:** The pipes carrying the flows from the subdrainage area should be able to handle peak flows. During September 5, 2003 telephone conversation with the Regional Board staff, John Hunter of the HKA indicated that the pipes are adequately sized to handle flows from 0.3 inches/hour of rainfall.

Mr. Donald L. Wolfe
Mr. Ken Farfsing

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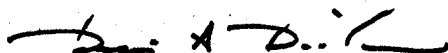
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- **Regular Inspections:** The netting system will be checked monthly during the dry season, weekly during the rainy season and after all rainfall events.
- **Regular Maintenance:** Adequate number of employees (currently four) will be used to change the nets. The nets will be changed when $\frac{3}{4}$ full during the dry season and when $\frac{1}{2}$ full during the rainy season thereby allowing the nets to continually maintain adequate flow through capacity.

The determination that the Fresh Creek Technology trash net system satisfies the full capture definition of the trash TMDL will allow the system to be used elsewhere in the region. Dischargers will have an on-going obligation to demonstrate that the installation of a particular system is appropriately sized. Likewise, dischargers will be responsible for on-going maintenance to ensure the systems perform to design specifications. The Regional Board will review and consider performance data on continuing basis. In the event data demonstrate that the systems are not performing to the full capture design standard established by the trash TMDL, then the Regional Board reserves the ability to rescind the certification for subsequent installations.

Please contact Michael Yang of my staff at 213/620-2093, if you have any further questions.

Sincerely,



Dennis A. Dickerson
Executive Officer

Attachments

cc: Michael Lauffer, Office of Chief Counsel, State Water Resources Control Board
Terry Fleming, Water Division, U.S. Environmental Protection Agency, Region 9
Mark Christoffels, Department of Public Works, City of Long Beach
Mr. John Hunter, Hunter and Kennedy Associates
John Meakim, Fresh Creek Technologies
Robert Skands, Tetra Tech, Inc.