



## CITY OF BEVERLY HILLS STAFF REPORT

**Meeting Date:** September 24, 2013  
**To:** Honorable Mayor & City Council  
**From:** Trish Rhay, Utilities Manager  
**Subject:** Public Works Commission Water Quality Report  
**Attachments:** 1. Memorandum Dated August 8, 2013; Coliform Bacteria Memo  
2. Memorandum Dated August 8, 2013; PWC Report to City Council

---

### INTRODUCTION

The Public Works Commission is transmitting their report regarding the City's water system to the City Council. Public Works Commission Chair, Barry Pressman, M.D., will be available to answer any questions that the City Council may have related to this Commission Report.

### DISCUSSION

At a recent Mayors Cabinet Meeting, Mayor Mirisch requested the Public Works Commission Chair to have the Commission author a report regarding routine samples from the City's water system taken in December 2012, which tested positive for total coliform. The Commission authored a memorandum to the City Council and approved it for transmittal to the City Council at its meeting of August 8, 2013. (See Attachment 1, memorandum dated August 8, 2103.)

The memo by the Commission contained several recommendations to staff, and the Commission also requested staff to provide a memorandum to accompany its report to the City Council, which would respond to the Commission's recommendations. (See Attachment 2, memorandum dated August 8, 2013.)

### FISCAL IMPACT

Transmittal of these reports to the City Council has no fiscal impact.

**RECOMMENDATION**

Pending no further direction from City Council, staff will continue to implement the recommendations in this report.

  
George Chavez  
\_\_\_\_\_  
Approved By

# **Attachment 1**



**CITY OF BEVERLY HILLS**  
**PUBLIC WORKS SERVICES**  
**MEMORANDUM**

**TO:** Beverly Hills City Council  
**FROM:** Public Works Commission  
**DATE:** August 8, 2013  
**SUBJECT:** **Coliform Bacteria Contamination of Beverly Hills Drinking Water**

---

On March 8, 2013, the City of Beverly Hills informed the residents of "*Traces of Non-Harmful Coliform Bacteria in Beverly Hills Drinking Water.*"

This was the first notice of this issue received by the Public Works Commission. The Commission immediately added this issue to the agenda of its April 11 meeting. Mr. Watson of the Public Works Department provided us with a report "*concerning the total coliform maximum contamination level (MCL) violation.*"

During this meeting, we became increasingly concerned by several issues: the cause of the contamination had not been determined and that it was being ascribed to poor or contaminated sampling related to the inclement weather at the time the samples were gathered; a citation had been issued by the California Department of Public Health for non-compliance of timely reporting of the contamination to the Department *and* to the residents of Beverly Hills; that the individual in charge of the sampling/reporting at the time of this occurrence had only been in this job for a month, and that the position was being rotated since the Water Quality Specialist had left the city's employment eight months previously.

In order to do a complete investigation, we requested and were accorded a tour of the entire water system which was accomplished on May 9, 2013. We visited all reservoirs, both above and below ground, pumping stations, and the reverse osmosis water treatment plant on Foothill Road. We had an opportunity to enter the Coldwater Canyon Reservoir since it was empty at that time. Subsequently, we were fortunate to be able to also visit the Greystone Reservoir on June 13, 2013. A small ad hoc committee consisting of Commissioners Foldvary and Shooshani investigated the sampling techniques during an onsite visit, and they made a full report to the Commission, including a tutorial on drinking water chloramination (chlorine and ammonia).

The Commission requested explanations from the Department of Public Works in the following areas:

- 1) The delay in notification of the state and how this would be prevented in the future;
- 2) The delay in notification to the residents and how this would be prevented in the future;
- 3) Procedure for responding to a positive coliform test and potential changes in the future;
- 4) The cause or possible causes of the 6 contaminated samples;

- 5) Processes that have been changed or will be changed to ensure that there are no future contaminations;
- 6) Should there be sampling directly from the reservoirs in addition to sampling from the distribution system as is the present situation.

In response, the Department prepared a comprehensive report. This was discussed by the Commission with Mr. Theisen and Mr. Watson at the July 11 PWC meeting. The report is candid and complete but raises some important issues that the PWC believes should be brought to the attention of the Council.

Some of these issues appear to stem from apparent chronic, systemic training, administrative and oversight deficiencies in the water section of the PWD, including inadequate training of the responsible individual, the functioning Water Quality Specialist. This position of Water Quality Specialist has been rotated since the permanent employee doing the work had left employment of the city. We recommend immediate replacement by a qualified individual and enhanced supervisory oversight until that is accomplished.

Due to these deficiencies:

- 1) Notification to the state and the residents of Beverly Hills was delayed.
- 2) The source or sources of the contamination have not been definitively determined. The July 11<sup>th</sup> report highlights a multitude of possibilities, some of which seem to the PWC to be extremely likely to have been involved.

#### Intrusion of contaminants into the water system

- a. The caulking in the Greystone Reservoir may not be adequate to prevent intrusion of ground water. This is to be researched as part of the development of an updated Water System Master plan. We recommend that this be done in an expedited fashion and not wait until the entire master plan process.

Inadequate attention to the dynamic movements of the water which need to be performed in our complex distribution system

- b. The circulatory device known as the Solar Bee in the Greystone Reservoir was non-functional for an undetermined period of time including during the period of the positive coliform samples. (Most of the positive coliform samples came from the zone that was being supplied from Greystone Reservoir.) The PWC has requested enhanced preventive maintenance of the Solar Bee System at this reservoir and the other reservoirs in the water system. The Public Works Department has already instituted such a program with the vendor.
- c. Greystone water aged as a result of the rehabilitation of Reservoir 4A. While 4A was out of service, the water level at Greystone could not be lowered because 3A had to

be kept full to supply Zone 8, which is normally supplied by 4A). Now that the rehabilitation of 4A is complete and it is back in service, this is no longer an issue.

Insufficient remediation response to inadequately low chlorine disinfectant levels

- d. The water utility staff closely monitors the total ammonia and total chlorine residual at Greystone. When there is any free ammonia present in the water they will add a small amount of chlorine to the water entering the reservoir to bring the residual chlorine to its full protection potential. Since there are no provisions for the addition of ammonia at the pump stations, the amount of chlorine that can be added is limited. Thus if the ammonia has already been consumed by nitrifying bacteria, the chlorine residual can't be increased without breaking to free residual chlorine. Breaking to free residual chlorine will get rid of the nitrifying bacteria, but the water can't be released from the Greystone reservoir until it can be changed back into chloramine residual water. Since it was impossible to bring the level of water down, the chloramine residual could not be increased. This should not be an issue in the future, since Reservoir 4A is back in service after its rehabilitation.

Delay of notifications regarding regulatory violations and citations

- e. The PWC is particularly concerned about the delayed notification of our residents and of the Commission itself. We believe we have made it quite clear to the DPW that this must not be repeated in any fashion. The Commission has directed the DPW to inform it in advance of any communications to our residents/customers. Further that we be immediately informed of any potential violations of county, state, or federal regulations or laws.

The PWC believes that the DPW has been forthcoming in this entire process. However as is clear from the above, there have been failures that must be addressed rapidly. In that regard, we do find that the DPW is moving rapidly and appropriately to rectify systemic and functional inefficiencies.

In closing, over the past several years the PWC has become increasingly active in monitoring the function of the DPW. Examples include: renegotiating the solid waste contract to one more advantageous to the city; reviewing the entire CIP program in advance of the Council; assigning sub-committees to participate in the implementation of appropriate CIP projects, e.g. pavement maintenance, water rates, garbage bin replacement, sewer relining, and the repaving of Santa Monica Blvd. The Commission will continue to expand its activities as appropriate and to keep the Council informed where we deem it necessary.

# **Attachment 2**



## CITY OF BEVERLY HILLS

### PUBLIC WORKS & TRANSPORTATION

#### MEMORANDUM

**TO:** Mahdi Aluzri, Acting Director of Public Works & Transportation/Assistant City Manager

**FROM:**  Chris Theisen, Assistant Director of Public Works & Transportation

**DATE:** August 8, 2013

**SUBJECT:** Report to the City Council from the Public Works Commission

---

At the August 8, 2013 Public Works Commission Meeting, a report from the Public Works Commission to the City Council titled *Coliform Bacteria Contamination of Beverly Hills Drinking Water* was discussed and approved by the Commission for transmittal to the City Council. It was also agreed that the report would be accompanied by a memorandum from staff detailing how the Commission's report recommendations would be addressed. Staff's responses to the recommendations in the Commission's report are shown below.

**Recommendation:** Immediately recruit and hire a permanent employee into the position of Water Quality Specialist.

**Response:** This recruitment was commenced, expedited, and completed. The new Water Quality Specialist, David Hillyer, commenced work in this position on July 29, 2013.

**Recommendation:** The condition of the caulking in Greystone Reservoir should be evaluated in advance of the completion of the Water System Master Plan.

**Response:** Staff agrees, and has already had a consulting engineer examine the caulking. We anticipate funding an agreement with this consultant to further analyze the caulking and infiltration issues and provided us a detailed report, recommendations, and cost estimates for any recommended repairs.

**Recommendation:** Staff should establish enhanced preventative maintenance service contracts for the Solar Bee recirculation devices to help ensure that they remain functional and effective.

**Response:** Staff has already established an enhanced scope of services with the vendor, and the agreement will be presented to the City Manager presently for signature. In addition, staff has also initiated a positive and proactive daily inspection program for all of the Solar Bees in service (in reservoirs 3A, 4A, 5, 6, 7, and Greystone).

**Recommendation:** Staff should inform the Commission in advance of any communication to residents and customers from the Department, and staff should inform the Commission immediately of any potential violations of county, state, or federal regulations or laws.

**Response:** Staff will comply with this request.

cc: Trish Rhay, Utilities Manager  
Kevin Watson, Water Operations Manager